

# NAVAL HEALTH RESEARCH CENTER

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## *A MODEL FOR PREDICTING MARINE CORPS DENTAL MATERIEL REQUIREMENTS*

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# A Model for Predicting Marine Corps Dental Materiel Requirements

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## **SUMMARY**

### **Background**

The maintenance and management of assets has become a unique challenge due in part to procurement, cost, space, storage, and transportation constraints. Medical and dental units must respond to the increasing speed and mobility of assault forces during a variety of operational scenarios. Accomplishing this objective for greater battlefield mobility requires that medical and dental be outfitted with equipment and supplies that are directly related to their mission and capabilities. Supplies linked to clinical requirements and knowledge of expected casualty rates will ensure that the proper assets are available.

### **Objective**

The primary objective of this study is to develop a model for the dental supply stream that links specific clinical requirements to dental procedures. This process produces an audit trail for each item in the U. S. Marine Corps supply system. The audit trail provides medical and dental planners and logisticians with a management tool for maintaining and updating supplies by linking the materiel with Marine Corps-specific requirements. In the present paper, mission specific requirements are used to determine the optimal Authorized Dental Allowance List (ADAL) configuration, instrument packaging, and pharmacy support necessary to accomplish the mission of the Naval Dental Commands who support the Marine Corps when deployed.

### **Approach**

Seventy-six subject matter experts (SMEs) with operational experience, representing a variety of dental specialties, assisted in the development of a dental condition list and the linkage of the materiels associated with them. The dental conditions (DCs) reflect the injuries and diseases known to occur in a theater of operation. The dental conditions were linked to the American Dental Association dental procedure codes used by the military services. Surveys reflecting the procedures used for each dental condition were distributed to the SMEs for modification and validation. Dental supplies and equipment were identified by the SMEs for each procedure and the associated DC, establishing a clinical requirement for each piece of materiel. Following the establishment of the clinical requirements for the supply items, a revised ADAL 662 was produced and compared with the current ADAL 662.

### **Results**

The ADAL equipment and consumables were linked to dental procedures determined by the SMEs to be associated with the 33 dental conditions expected during conflicts, field training exercises, and deployments. An audit trail was established by linking the equipment and consumables to the dental procedures to be performed. Clinical capability was enhanced by the introduction of items that increased the number of treatment options available to dental providers. An increased level of standardization was also achieved in the current study by incorporating tri-service approved materiel identified by the Joint Readiness Clinical Advisory Board. The results demonstrate the effectiveness of the audit trail to help logisticians, and dental and medical planners manage and upgrade ADAL materiel.

## **Conclusion**

The resulting database is a tool for conducting future ADAL reviews, and for making decisions about adding and deleting new items. The model can be used to determine the specific supply configuration for other missions and objectives. It is also useful in determining the appropriate type and number of supply items required for the delivery of sick-call dental care. As Marine Corps doctrine requires more mobile, modular, flexible, and deployable dental care systems, the Naval Health Research Center model can be used in the configuration of dental supplies needed for a variety of scenarios.

# **A MODEL FOR PREDICTING MARINE CORPS DENTAL MATERIEL REQUIREMENTS**

## **INTRODUCTION**

Global threats of terrorist actions, hostilities, and humanitarian operations require an immediate response from our military forces. Operational readiness to support the mobilization, deployment, and engagement of U.S. Marine Corps forces is key to the success of these missions and must remain a high priority. The maintenance and management of assets has become a unique challenge due in part to procurement, cost, space, storage, and transportation constraints.

The challenges set forth by current and future threats and the mandate to increase speed and mobility have contributed to the need to review the current Authorized Dental Allowance List (ADAL). Mission-specific standards of care and requirements for the items used for specific dental conditions experienced in a theater of operations must be established so that only those items are stocked. Using this method, the dental support is scenario-based and capable of quick and efficient delivery.

As a result of changes in the tempo, mobility, and momentum set by Marine Corps doctrine and policy, the Navy Dental Corps, which supports the Fleet Marine Force, has made numerous changes in the ADAL 662 Field Dental Operatory. The Dental Corps is dedicated to improving and upgrading the ADAL to make it functional in providing the best care to maximize dental readiness of supported troops.

Changes to the organizational structure, missions, and objectives have not affected the long-term need to improve the ADAL configuration to meet the variety of material requirements necessary during different scenarios. The current process is unable to identify and match consumables and equipment stocked in the ADAL to the types of conditions and procedures expected during different scenarios. These constraints limit the ADAL's flexibility for use in a variety of scenarios and mission objectives.

Efforts conducted by the Naval Health Research Center have yielded significant reductions in medical materiel weight and cube while also providing upgrades in technology and medical capabilities (Emens-Hesslink, Galarneau, Lowe, Smith, & Konoske, 2000; Galarneau, Konoske, Emens-Hesslink, Pang, & Gauker, 1997; Galarneau, Konoske, Emens-Hesslink, Pang, & Gauker, 1998; Galarneau, Mahoney, Konoske, & Emens-Hesslink, 1997; Galarneau, Pang, & Konoske, 1999; Galarneau, Pang, Konoske, & Gauker, 1998; Gauker, Galarneau, & Konoske, 1999). The flexibility provided by the systematic approach allows the medical resources to be adapted and configured to support different war fighting concepts and missions as they emerge. The revised medical supply requirements were designed to be mission-specific so that the supply stream reflects changes in the technology and the mission. Logistics are facilitated with a smaller footprint, and medical capabilities are enhanced with better technology.

This same approach of linking clinical requirements to supply items was used to develop task-driven supply requirements to enhance the technology, flexibility, and mobility of the ADAL 662. Information in this report relies on the current mission of dental personnel to maximize dental readiness and maintain dental combat operations. The dental conditions and rates of occurrence during conflicts, deployments, and field training exercises (FTX) were gathered (Roberts, Konoske, & Emens-Hesslink, 1999) in Phase I of this project. The dental procedures and profiles detailing the supplies required to complete each procedure were determined for those dental conditions. By using this approach, an audit trail was developed that can be used to manage future ADAL modifications. Items removed from the ADAL can be referenced through the database to account for any items associated with it or the types of procedures that are performed using the item. Using the approach of linking equipment and consumables to DCs and procedures also aids in the identification of the capability of the ADAL.

## METHOD

### Dental Conditions

In Phase I of this project, a list of dental conditions considered representative of the dental injuries expected to occur in theater was proposed. Dental conditions are shown in Table 1. This effort linked the dental procedures, equipment, and consumables to those dental conditions. A more detailed list of the 33 dental conditions and their descriptions can be found in Appendix A.

**TABLE 1: DENTAL CONDITIONS LIST**

DCC	Description	DCC	Description
800	Acute necrotizing gingivitis (ANUG)	817	Gingivitis
801	Alveolitis/alveolar osteitis (localized)	818	Maxillary sinusitis
802	Apical abscess/periapical abscess	819	Occlusal trauma
803	Avulsed, mobile, displaced tooth	820	Oral ulcers
804	Candidiasis	821	Osseous sequestrum
805	Caries no pulp involvement	822	Osteomyelitis
806	Caries pulp involvement	823	Soft tissue trauma/laceration
807	Cellulitis*	824	Pericoronitis (erupting tooth)
808	Crown loose	825	Periodontitis/periodontal abscess
809	Crown broken/missing	826	Postoperative problem
810	Defective restoration	827	Postsurgical problem
811	Dentin hypersensitivity	828	Prosthesis loose
812	Food impaction/foreign body removal	829	Prosthesis broken/missing
813	Fractured alveolar bone	830	Pulpitis irreversible
814	Fractured mandible*	831	Pulpitis reversible
815	Fractured maxilla*	832	Root fracture
816	Fractured tooth	833	Space infection

\* Conditions covered by medical patient condition code.

Dental conditions were compared with medical patient conditions to eliminate duplication. These conditions (cellulitis, fractured maxilla, and fractured mandible) would be seen by a medical doctor, stabilized, and evacuated for more definitive care. Dental conditions marked with an \* indicate conditions that are treated by medical personnel.

### **Participants**

Seventy-six subject matter experts (SMEs) experienced in field dental care participated in the study. These SMEs were drawn from 12 Navy/Marine Corps and joint military commands (see Table 2). Fifty two SME professionals experienced in field dental care participated in many of the surveys that were drawn from all four Marine Corps Dental Battalions. The dental specialties represented by the SMEs are shown in Table 3.

**TABLE 2: SUBJECT MATTER EXPERT COMMAND REPRESENTATION**

<b>Commands</b>	
1 <sup>st</sup> Dental Battalion, Camp Pendleton, CA	1 <sup>st</sup> Medical Logistics Command, Camp Pendleton, CA
2 <sup>nd</sup> Dental Battalion, Camp Lejeune, NC	2 <sup>nd</sup> Medical Logistics Command, Camp Lejeune, NC
3 <sup>rd</sup> Dental Battalion, Okinawa, Japan	Marine Corps Combat Development Command, Quantico, VA
4 <sup>th</sup> Dental Battalion, San Diego, CA	Combined Service Trade School, Sheppard Air Force Base, TX
1 <sup>st</sup> Force Service Support Group, Camp Pendleton, CA	Marine Force Pacific (MARFORPAC), Camp Smith, HI
2 <sup>nd</sup> Force Service Support Group, Camp Lejeune, NC	Marine Force Atlantic (MARFORLANT), Norfolk, VA
Marine Corps Systems Command (MARCORSYSCOM), Quantico, VA	Headquarters Marine Corps, Quantico, VA

**TABLE 3: DENTAL SUBJECT MATTER EXPERT SPECIALTIES**

Specialties	Number
General dentist	18
Endodontist	5
Periodontist	8
Prosthodontist	3
Oral & maxillofacial surgeon	2
Exodontist	4
Comprehensive dentist	3
Dental technicians	9

### **Procedures**

Two surveys were distributed to the SMEs from each of the four Marine Corps Dental Battalions. The first survey required the SMEs to examine the procedures associated with each of the dental conditions. SMEs were asked to adjust the procedure profiles for each of the dental conditions to more closely reflect Marine Corps level of care rendered in a theater of operation. The second survey required the SMEs to identify the appropriate consumables and equipment supply stream required to administer the care for each of the procedures for one patient.

SMEs from each of the commands listed in Table 2 were again contacted and asked to participate in panel discussions. More general dentists than specialty dentists participated on the panels since general dentists are deployed more frequently. These SMEs reviewed and refined the data.

The survey and panel discussion results were compiled into a database. A weighted value corresponding to the number of SMEs who selected a procedure for a given DC was then calculated. Procedures identified as being performed by 25% of the dentists were placed on the list as possible procedures for that particular dental condition. Some exceptions were noted. For example, many conditions required the use of anesthesia. Two procedures are generally used, 09215 local anesthesia and 09211 regional block anesthesia. Local anesthesia procedures are usually reserved for maxillary arch teeth and regional block procedures are most often performed when the condition occurs on the mandible arch. Both procedures were assigned to those conditions requiring anesthesia. Further analysis of the Dental Information Reporting System (DIRS) was then used to determine a percentage of the two procedures.

### **Projecting Dental Supply Requirements**

#### **Instrument Packs**

No current methods are used to organize the dental instruments in the ADALs. SMEs were asked to examine the current instruments in the ADAL and provide a list of possible package designs. SMEs were also asked to list instruments that are needed but not presently in the current ADAL. The number of instrument packs was determined by the

amount needed to sustain a sick-call patient load over a 12-hour period, including emergency, preventive, and sustainment care. The quantity of packs were also associated with the current steam sterilizing capabilities.

### **Dental Equipment Requirements**

Equipment requirements were projected for the ADAL 662 using the procedures associated with the DC. Once the dental procedures for each was established, SMEs identified the equipment requirements. This process was accomplished by linking each equipment item considered for inclusion in the ADAL 662 to a known dental procedure to be conducted. Once each item in the proposed ADAL was identified, the amount of each item to be stocked was determined. This was accomplished by matching item quantity with the current ADAL quantity and increasing or decreasing according to the ADAL requirement. The ADAL is designed to support a dental officer responsible for providing dental care to 400 dental patients in the first 30 days of deployment.

### **Dental Consumable Requirements**

Dental consumable requirements were also projected for the ADAL 662 using the same approach as with the equipment. The SMEs determined the consumables associated with each procedure. The amount of each consumable item to be stocked is highly dependent upon the anticipated patient stream. The present estimated amounts of consumables are based on the current ADAL capability to treat 400 patients.

### **Medications**

SMEs were asked to review each DC and identify the appropriate medications that the conditions would require in an operational setting. SMEs identified the medications necessary for each DC and the prescribed quantity to treat one patient.

### **ADAL Can Configuration**

No current standard method is presently in place to instruct the Medical Logistics Commands how to organize the 13 cans found in the ADAL 662. Each can was configured so that equipment and consumables with a similar function, procedure, or DC were placed in the same box. Large item equipment that required special packaging were kept in a separate box.

### **Upgrades in Technology**

Equipment and consumables were reviewed to ensure that tri-service utility and Department of Defense standardization was observed. Recommendations for equipment and consumables were made based on the need to improve technology, clinical need, or standardization.



## RESULTS AND DISCUSSION

### Dental Conditions

Dental conditions were compared with the medical patient conditions. The dental conditions in Table 4 are listed with the corresponding medical patient conditions. These dental conditions would most likely be seen and treated by medical personnel rather than dental personnel. Since medical units have planned supplies for these conditions, supplies do not need to be duplicated. In the event of a conflict, many of the dentists deployed would be general dentists. Many of the specialty dentists would be at a higher echelon. Individuals with these conditions would require specialty care and would be evacuated to a higher echelon for more definitive care, therefore eliminating the need for dental to carry the supplies associated with them.

**TABLE 4: MAPPING DENTAL CONDITIONS TO PATIENT CONDITIONS**

DCC	Dental Condition	PCC	Patient Condition
807	Cellulitis	206	Cellulitis involving face or weight-bearing areas
814	Fractured mandible	822	Fracture mandible with/without oral laceration without airway involvement unstable severe requiring open reduction
814	Fractured mandible	823	Fracture mandible with/without oral laceration without airway involvement mild displacement stable
815	Fractured maxilla	015	Fracture facial bones closed exclusive of mandible severe – multiple fractures
815	Fractured maxilla	016	Fracture facial bones closed exclusive of mandible moderate – single fracture
818	Maxillary sinusitis	232	Infections of the nose & paranasal sinuses including viral rhinitis

*DCC = Dental Condition Code*

*PCC = Patient Condition Code*

The dental conditions list covers all major conditions that may be observed during conflicts, deployments, and field training exercises. Historical data often use various methods of categorizing dental casualties. Comparisons over time are difficult to analyze because of the various reporting, sampling, and collection methods used.

The current list of conditions (Appendix A) is recommended as a scheme to categorize dental casualties. This list could form the basis for a standardized method of collecting and reporting data. Comparative limitations as observed by previous military dental reports could be eliminated. This approach would be more thorough in scope than previous military dental health surveys. It would include a measure of an individual's dental fitness, which could then be linked to the procedures and supplies used for treatment. This would provide a more comprehensive database that could then be used to identify DCs that would greatly enhance the prediction of resources. As changes occur in



the population or the mission, the procedures linked to the conditions could be modified as needed.

### **Dental Procedure Determination**

SMEs developed a procedure profile that reflected the range of clinical care expected to be administered to casualties for each of the 33 DCs. SMEs identified the procedures that would be performed per patient for each of the DCs. Some procedures were best represented with a probability of occurrence because the treatment procedures would not be uniformly applied. For example, SMEs did not always recommend that 100% of patients presenting with certain DCs receive procedure 09215 local anesthesia. This procedure depended on the location of the condition. If the condition occurred on the maxillary arch, local anesthesia procedure would be performed. If the condition occurred on the mandibular arch, then regional anesthesia procedure would be performed. For these procedures, data from DIRS were reviewed to determine the percent likelihood of each procedure. Appendix B displays each condition with the procedures determined by the SMEs.

### **Projecting Dental Supply Requirements**

#### **Instrument Packs**

Instruments were organized into packs to ensure that enough instruments were available for the types of conditions expected to be performed. To reduce redundancy and weight, the packs were designed to be subsets of the exam packs. For example, an operative pack used to treat a variety of dental conditions (e.g., caries, defective restorations, fractured tooth) includes all necessary instruments as prescribed by SMEs, with the exception of the exam pack instruments. When an individual reports to the dental unit for care the first procedure is an examination, which requires an examination pack. This procedure determines what subpack is needed to complete the dental care. A complete listing of the instruments in the packs and subpacks is located in Appendix C.

This organization of instruments reduces the time spent searching for instruments in the ADAL. SMEs estimated the quantity of subpacks according to the turnaround period needed to sterilize and dry instruments. For example, four operative packs were determined to be sufficient for an ADAL that supports one dental officer. While one set may be in use, one set will be sterilizing, and another may be in the sink waiting to be washed. The last set was provided in the event that time did not permit the dental technician to get all the sets in for sterilization or during high demand periods. The number of sets was also based on the likelihood of occurrence of those DCs.

The surgery, fracture, post surgery treatment (POT), incision and drain (I & D), and periodontal/prophy packs were arranged differently. Both the surgery and fracture packs were equipped with all the instruments necessary to perform the procedures associated with them and were not made to be subpacks of the exam pack. The conditions associated with both these packs are very specific and must adhere to strict sterilization requirements to reduce infection. The POT and I & D packs are used when a patient is returning from previous treatment such as suture removal or observation of healing. For this reason, an exam pack is not necessary. The periodontal/prophy pack also contains all

the necessary instruments to perform a prophy or deep scaling. Individuals requiring this type of care are usually scheduled to see the hygienist separately from the dental officer. Therefore, it is necessary to keep all instruments for this pack together. SMEs determined the number of sets that would provide continuous operational capability using the current hot sterilization methods.

**TABLE 5: DENTAL INSTRUMENT PACK LIST**

Packs and Subpacks	Quantity
Exam pack	22
Operative subpack	4
Surgery pack	2
Fracture pack	1
Incision & drain pack (I & D)	2
Post operative treatment/Post surgery treatment pack (POT)	4
Endodontic subpack	2
Periodontal/Prophy pack	5
Prosthetic subpack	1

### **Equipment and Consumables**

Dental supply estimates were projected for equipment and consumables for ADAL 662. The supplies needed for each dental procedure linked to the DCs were identified. Supplies not linked to a clinical requirement were deleted, and items not currently in the ADAL that were linked to clinical requirements were added. For example, the current ADAL consisted of an alcohol torch but no alcohol for its use. Instead, a touch torch lighter, which requires less space and is more efficient than the alcohol torch, was recommended. Other items, such as an x-ray unit and intermediate restorative material (IRM) capsules were added to either upgrade the technology or to include items that were DoD standardized. Linking supplies to procedures reduced redundancy. For a complete listing of the supplies required for each dental procedure see Appendix D.

### **Medications and Pharmacy Support**

Recently the pharmacy Authorized Medical Allowance Lists (AMALs) 629 and 630 were reviewed, resulting in significant reductions in weight and cube (Gauker, Galarneau, & Konoske, 1999). The reorganization contributed to a faster response time and greater flexibility in the pharmacy AMALs required by Marine Corps doctrine. Improved packaging and disposable supplies made it possible for each functional area to store its own medical supplies pertinent to its function and patient stream. Items that could not be matched to a specific medical task were not considered for inclusion in the pharmacy AMAL. If a medication did not have a medical clinical requirement, it was deleted from the pharmacy AMAL. Medications were reduced to alleviate redundancy when supplied in more than one functional area.

At the time of the review of the pharmacy AMALs, DCs and materiel had not been assessed. Currently the pharmacy AMAL 630 is supplied with only two medications used to treat dental conditions, acyclovir capsules and ibuprofen tablets. Many of the DCs require medications and must be considered. SMEs identified the medications necessary for each DC and the prescribed quantity for one patient. The medications required for the DCs are listed in Table 6.

It is recommended that dental medications be included in the pharmacy AMAL 630 but packaged separately for accessibility. The controlled items should be maintained by pharmacy personnel. Future pharmacy AMAL reviews should include input from dental personnel.

### **Dental Repair**

Dental repair items have always been an issue of concern for medical logistics commands and the dental units. Dental repair items are spread out in AMAL 691 (MEDLOG Test/Repair Equipment), AMAL 692 (MEDLOG Test/Repair Supply), and many are loosely incorporated into the ADAL. No system is currently in place to ensure that the items in these AMALs reflect the repair needs of the equipment in the ADALs or changes that may occur with additions or deletions of items. The Naval Health Research Center is reviewing these AMALs to apply the same approach of linking the equipment and consumables to the equipment that it is designed to repair. Both MEDLOG and dental personnel have expressed concerns associated with the repair items being in too many places and not accessible when needed. It is recommended that the repair items for the dental equipment be identified and configured in a box of their own within the AMALs. This will help facilitate the items being more accessible to both the repair and dental technicians.

**TABLE 6: MEDICATIONS REQUIRED FOR DENTAL CONDITIONS**

<b>DCC</b>	<b>Dental Condition</b>	<b>Medications</b>
800	Acute necrotizing gingivitis (ANUG)	Motrin, Vicodin or Tylenol #3*, Saline, Peridex, Tetracyclin, Doxycycline
801	Alveolitis/alveolar osteitis (localized)	Motrin, Vicodin or Tylenol #3*, Chlorhexidine rinse
802	Apical abscess/periapical abscess	Motrin, Vicodin or Tylenol #3*
803	Avulsed, mobile, displaced tooth	Motrin, Vicodin
804	Candidiasis	Nystatin oral rinse
805	Caries no pulp involvement	
806	Caries pulp involvement	Motrin, Vicodin or Tylenol #3*, Penicillin, Sodium Hypochloride
807	Cellulitis	Penicillin, Augmentin
808	Crown loose	<i>none indicated</i>
809	Crown broken/missing	<i>none indicated</i>
810	Defective restoration	<i>none indicated</i>
811	Dentin hypersensitivity	<i>none indicated</i>
812	Food impaction/foreign body removal	Motrin
813	Fractured alveolar bone	Motrin, Penicillin, Augmentin, Saline
814	Fractured mandible	Vicodin or Tylenol #3*, Saline
815	Fractured maxilla	Vicodin or Tylenol #3*, Saline
816	Fractured tooth	Motrin
817	Gingivitis	Kenalog in Orabase
818	Maxillary sinusitis	Benadryl, Entex, Augmentin
819	Occlusal trauma	<i>none indicated</i>
820	Oral ulcers (cold sores, oral herpes, aphthous ulcers, canker sores)	Acyclovir ( <i>pill and ointment</i> ), Motrin, Kenalog in Orabase, Nystatin ( <i>oral rinse</i> )
821	Osseous sequestrum	Motrin, Vicodin or Tylenol #3*
822	Osteomyelitis	Penicillin, Augmentin
823	Soft tissue trauma, laceration	Motrin
824	Pericoronitis/erupting tooth	Motrin, Vicodin or Tylenol #3*, chlorhexidine rinse, Augmentin,
825	Periodontitis/periodontal abscess	Motrin, Vicodin or Tylenol #3*, Doxycycline
826	Postoperative problem	Motrin, Vicodin or Tylenol #3*
827	Postsurgical problem	Motrin, Vicodin or Tylenol #3*
828	Prosthesis loose	<i>none indicated</i>
829	Prosthesis (broken/missing)	<i>none indicated</i>
830	Pulpitis (irreversible)	Motrin, Vicodin or Tylenol #3*, Saline
831	Pulpitis (reversible)	Motrin, Vicodin or Tylenol #3*, Saline
832	Root fracture	Motrin
833	Space infection	Motrin, Penicillin, Augmentin

*\*Vicodin and Tylenol #3 are both controlled substances used as pain medications*

*DCC=Dental condition code*

### **Upgrades in Technology**

Technology is constantly changing and so must the ADALs to deliver the best possible dental care. Some of the upgrades in technology recommended include the use of IRM capsules instead of the current two-system powder and liquid IRM, which also requires parchment paper. The capsules would eliminate the parchment paper and spatula used for mixing. The current ADAL consisted of an alcohol torch but no alcohol for its use. The torch was designed to be used during placement of the gutta percha for endodontic care. Instead, an Endo Touch Torch, which requires less space and is more efficient than the alcohol torch is recommended.

The self-developing film provided in the current ADALs provides very poor contrast, the image degrades over time, and the patient film history is lost. The base of the current x-ray unit is very unstable and has to be secured with sandbags to keep it from falling. It is recommended that the x-ray unit and film be examined during future review panels. Digital x-ray technology may prove to be advantageous but this technology is still very new. More comprehensive testing is recommended before an x-ray unit is placed in the ADALs. A hand developer and periapical film may be recommended until an appropriate x-ray unit is identified. Digital x-ray units require a laptop and a source for printing. This technology is very costly initially but over time pays for itself and increases dental capability and quality of care.

The current compressor is inadequate for the equipment it supports, it has limited horsepower and is too heavy. There are many new compressors on the market that should be considered. The current field sink has not proved to be durable or reliable during its use, therefore a more durable field sink is recommended. Although the ADAL contains a pulp tester, many dentists have begun to use endo ice in its place. It is recommended that endo ice be added to the ADAL to enhance the capability.

As technology and the standard of care change, the ADAL should reflect these changes. The database can help identify the items that must be removed when newer technology is added.

### **Other Recommendations**

The dental stone, alginate, and impression trays were recommended for deletion because these items did not meet the clinical requirements. They were also recommended for deletion because they were rarely used unless a Prosthodontist was deployed. Prosthodontists are usually located at a higher echelon.

Dental condition "814 Fractured mandible" and "815 Fractured maxilla" do not currently have equipment or supplies associated with their treatment. Although many of the oral surgeons recommended stabilization and the placement of arch bars, general dentists are not generally trained to apply them. It is recommended that stomahesive be added to the ADAL to increase the capability and provide assistance in stabilization of these conditions until the patient is evacuated. The stomahesive can also be used for dental condition 803 Avulsed, mobile, displaced tooth as a temporary splinting material.

Temporary crowns may be used until the patient can be evaluated at a fixed facility for dental care. It is recommended that a combined set of temporary crowns be added to the ADAL. Patient drapes are recommended as replacements for the large paper towels that are currently in the ADAL and used to cover the patient during care. The soap (detergent surgical 4% chlorhexidine gluconate 65051453255) currently in the ADAL is 32 fluid ounces and is used to wash hands after each patient. It is recommended that a plunger also be supplied to facilitate usage and decrease cross-contamination. The sodium hypochlorite is supplied in a large bulky container used for various operations and as a disinfectant. Many times the container becomes punctured and ultimately destroys all other items in the same box. It is recommended that a dry form be issued and mixed as needed.

At the time of use, almost 50% of perishable dental material are past the manufacturer's expiration date (Hondrum, 1994). This is due in part to the inherent time delays within the military logistics system and storage conditions. This problem is magnified under wartime conditions when deployed materials are used. No countermeasures are in place to counteract the loss in quality control and financial resources that follow either the use or discarding of expired dental materials. The Army's Dental Material Section completed a 5-year storage stability study for more than 20 commonly used dental material. It discovered that many of the dental materials become unstable and degrade in quality over time upon exposure to a variety of environmental stressors typical of extreme military environments (Williams & Hondrum, 1994). For example, gloves, gutta percha, and rubber dams become sticky and nonusable after sitting in the warehouse over time. It was also discovered that many pharmaceutical companies did not meet manufacturer's claims for pH levels of antioxidants and vasoconstrictors and that these deficiencies affect their storage stability. These deficiencies are of great concern to the military. Items such as composite resin have an extremely short shelf life and are affected by the extreme heat when stored in the MEDLOG warehouses. Many of the dental materials are recommended by the manufacturer's to be refrigerated or kept at temperatures well below those experienced in the warehouses (McCarthy & Hondrum, 1994).

Marine Corps MEDLOG commands have suggested using a prime vendor method of supply and exchange with the dental commands to resolve this problem. The dental commands would serve as the prime vendors for MEDLOG and supply many of the perishable dental materials for the ADALs. This method of supply would help to ensure that supplies issued are not deficient in quality. Resources are lost when expired material must be discarded. It is also recommended that Medical Logistic commands become a prime vendor for dental clinics on items close to expiration. These items could be used in the clinics before the expiration occurs, which would save significant expense for the Marine Corps military dental units.

This method of prime vendorship has been tested by the 1st Dental Command at Camp Pendleton, CA with great success. The relationship built by the two commands has saved significant resources and money. It is recommended that policy be directed to ensure that all MEDLOG commands are able to benefit from this process and that future review

panels discuss which items should be included in this process. The database can be used to help identify these items.

### **Can Configuration**

Each ADAL consists of 13 boxes of equipment and supplies. In a field environment, organization is important to ensure prompt care under conditions of increased tempo, stress, and pressure. It is recommended that each can be labeled with the number associated with the contents of the container. The manifest of each container and the specific organization will also help to ensure a quicker turn around during, before, and after inspections. Many smaller items associated with each other were designated by MEDLOG personnel and packaged into kits. This could help decrease the chances of the smaller items being lost or misplaced and consequently lost dollars. Table 7 shows the proposed can configuration.

**Table 7: Proposed Can Configurations**

Operative	Field equipment (chair, stools, lights)
Endo	Surgery
Prophy	Repair equipment
Administration	Consumables
<b>Specialized Compartment Cans</b>	
Sterilizer	Compressor
Field sink	X-ray
Field dental unit	



## CONCLUSIONS

Our Marine Corps forces expect and deserve the best dental care regardless of where they are serving around the world. Dental personnel must be properly equipped and deployed to meet the requirements of operational needs. As policy and doctrine continue to evolve, the model presented in this paper can be modified as needed to project dental supply requirements. The process provides an audit trail for each item, and the supply requirements are clearly linked to the dental procedure requiring them. As the mission changes, along with changes in dental technology, items may be added or deleted from the ADALs with greater assurance that the materiel would meet projected operational requirements.

Data collection is vital for operational planning in future deployments as well as for monitoring the adequacy of dental support. Existing data collection and the use of after-action reports do not always quantify the information that is needed. It is essential to update our knowledge base about the incidence of dental emergencies, the prevalence of dental conditions, and their treatments during military deployments. Obviously, an armed conflict has a greater potential and more serious casualty rate than a field training exercise. Length, remoteness, types of weapons used by opposing forces, and intensity of the conflict may influence the incidence and mix of casualties. No system is currently in place to collect data on dental conditions that occur during the different scenarios and to link directly to the supplies and procedures completed. The DIRS collects information on the procedures but not the actual conditions. Through the database developed by the Naval Health Research Center, clinical requirements for the items in the ADAL were identified. Items found to be redundant or lacking a clinical requirement were recommended for deletion, while other items were added to achieve a clinical requirement not being met. Consequently, a greater capability was achieved. Further data collection can utilize the DC list as a standardized method to link procedures and supplies. The ADAL can be modified as the mission and dental conditions expected to be treated are changed.

The current ADAL was not designed to meet the needs of today's dental missions. Dental commands augment the ADAL with a "TO GO BOX" to meet the needs of a variety of missions. For example, humanitarian missions require more surgical supplies than the current ADAL allows. The database developed in this paper could be used to configure supplies and equipment necessary for all types of missions including military missions other than war. As the mission changes, along with changes in dental technology, items could be added or deleted from the ADAL with greater assurance that the materiel would meet the operational requirements.

It is very important to evaluate new technology, such as digital x-ray, bonding agents, and other items. The audit trail and database provided by this system allow for easier incorporation of new items and removal of old items. In the past when old items were removed, the associated items were overlooked. Using the database would eliminate redundancy and the waste of items that are no longer used or need to be stocked.



This paper described the systematic process used to review the Marine Corps dental supply requirements. This approach consisted of identifying the dental procedures required to treat patients with dental conditions and determine the supplies and equipment required by each procedure. By establishing the clinical requirement for each item pushed forward, the NHRC model enhanced far forward dental capability. The result of this effort is a database that can be accessed to help understand the relationship among dental conditions, dental procedures, supplies and equipment when conducting ADAL reviews, determining training requirements, or configuring supplies for future deployments.

NHRC has incorporated this research and the database into a computer program called Estimating Supplies Program (ESP) for use by medical and dental providers, planners, and trainers. ESP is a user-friendly computer program designed to calculate the amount of supplies required by an operational scenario and to help understand the relationship among level of care, tasks, supplies and equipment. Users can query the database to determine which tasks use a particular supply or which dental conditions require a particular procedure. This information is useful to providers deciding which supplies to carry, trainers determining which tasks to teach, and planners deciding how much space is required for supply transport. It is recommended that use of ESP be encouraged and further development of the underlying databases be pursued.

**Appendix A**

**Dental Condition List and Description**

## Appendix A - Dental Condition List and Description

DCC	DENTAL CONDITION DESCRIPTION
800	Acute necrotizing gingivitis (ANUG)- An inflammation of the gingiva characterized by necrosis of the papillae, ulceration of the gingival margins, appearance of a pseudomembrane, pain, and a fetid mouth odor.
801	Alveolitis/Alveolar osteitis (localized)- Infection of an extraction site (dry socket, localized osteitis).
802	Apical Abscess/Periapical Abscess- Collection of purulent exudate around the area of the tooth that surrounds the root tip.
803	Avulsed, mobile, displaced tooth- Separation or displacement of an entire tooth structure from its supporting and attaching tissues.
804	Candidiasis- Fungal infection.
805	Caries No Pulp Involvement- Deterioration of enamel by decay that does not extend to the pulp.
806	Caries Pulp Involvement- Deterioration of enamel by decay that extends to the pulp.
807	Cellulitis- Inflammation of the subcutaneous tissue caused by group A beta hemolytic streptococci.
808	Crown loose- Loose tooth cap.
809	Crown broken/missing- Broken or fracture of tooth cap.
810	Defective Restoration- Deterioration, fracture, or loss of permanent or temporary non-cast restoration.
811	Dentin hypersensitivity- A portion of the protective covering from the hard enamel coating of the tooth is lost causing the odontoblasts to be exposed and hypersensitive to hot and cold substances.
812	Food impaction/Foreign body removal- Food or object that is lodged in gums.
813	Fractured alveolar bone- A break in the bone surrounding a tooth.
814	Fractured mandible- Fracture or break of the lower jaw.
815	Fractured maxilla- Fracture or break of the upper jaw.
816	Fractured Tooth- Fracture or break in the tooth with or without the loss of a portion of the tooth enamel crown.
817	Gingivitis- Acute or chronic inflammation of the gingiva.
818	Maxillary sinusitis – Infection of sinus area accompanied by inflammation and drainage. Conditions may mimic toothache.

## Appendix A - Dental Condition List and Description

DCC	DENTAL CONDITION DESCRIPTION
819	Occlusal Trauma - Trauma to the incisal surface or occlusion of teeth.
820	Oral ulcers: (cold sores, oral herpes, aphthous ulcers, canker sores) - Ulcers that affect the oral cavity.
821	Osseous sequestrum- Bone splinters.
822	Osteomyelitis - Microbial infection of bone marrow.
823	Soft tissue trauma/laceration - Oral or facial soft tissue abrasion, contusion, or burn.
824	Pericoronitis /erupting tooth - Acute inflammation of tissue area surrounding tooth, most commonly associated with erupting third molars.
825	Periodontitis/periodontal abscess- Advanced gum disease and inflammation which causes bone loss resulting in tooth loss if untreated.
826	Postoperative Problem - Conditions associated with previous operative treatment such as bite adjustment, etc.
827	Postsurgical Problem - Conditions associated with previous surgical treatment such as swelling from tooth extraction, etc.
828	Prosthesis loose - Deterioration of adhesion of a fixed or removable appliance that replaces missing teeth (for example bridges, dentures and partials).
829	Prosthesis (broken/missing)- Absence, deterioration defect, or fracture of a fixed or removable appliance that replaces missing teeth (for example bridges, dentures and partials).
830	Pulpitis (irreversible) - Inflammation of the dental pulp or nerve associated with throbbing continuous pain that is spontaneous that lingers even after the stimulus is removed.
831	Pulpitis (reversible) - Inflammation of the dental pulp or nerve associated with short lived pain following application of hot, cold, sweet, or biting stimulus.
832	Root fracture- Fracture or break in part of the tooth below the crown.
833	Space Infection – Infection associated with the extraction of a tooth.

## **Appendix B**

### **Dental Conditions Linked to Dental Procedures**

## Appendix B - Dental Conditions Linked to Dental Procedures

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### Dental Condition: 800 ANUG

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DPC	Dental Procedure
00140	Limited oral evaluation
01110	Prophylaxis-adult
01310	Nutritional counseling
01320	Tobacco counseling
01330	Oral hygiene instructions
04341	Perio scale and root plan, per quad
04355	Full mouth debridement to enab comp perio evaluation
09211	Regional block anesthesia
09215	Local anesthesia
09630	Other drugs and/or medicaments
09973	Patient treated

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### Dental Condition: 801 Alveolitis/Alveolar Osteitis (localized)

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DPC	Dental Procedure
00140	Limited oral evaluation
01310	Nutritional counseling
01320	Tobacco counseling
01330	Oral hygiene instructions
04920	Dressing change
09110A	Pall (emergency) treatment of dental pain - initial dressing change
09211	Regional block anesthesia
09215	Local anesthesia
09630	Other drugs and/or medicaments
09973	Patient treated

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### Dental Condition: 802 Apical/Periapical Abscess

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DPC	Dental Procedure
00140	Limited oral evaluation
00220	Intraoral-periapical-first film
00230	Intraoral-periapical-each additional
00460	Pulp vitality tests
01330	Oral hygiene instructions
02940	Sedative filling
03220	Therapy pulpotomy (excluding final restoration)
03310	Anterior (excluding final rest)
03320	Bicuspid (excluding final rest)
03330	Molar (excluding final rest)
07510	Incision and Drain of abscess - intraoral soft tissue
09211	Regional block anesthesia
09215	Local anesthesia
09630	Other drugs and/or medicaments
09973	Patient treated

## Appendix B - Dental Conditions Linked to Dental Procedures

### **Dental Condition: 803 Avulsed/Mobile/Displaced Tooth**

<b>DPC</b>	<b>Dental Procedure</b>
00140	Limited oral evaluation
00220	Intraoral-periapical-first film
00230	Intraoral-periapical-each additional
00460	Pulp vitality tests
01330	Oral hygiene instructions
03310	Anterior (excluding final rest)
03320	Bicuspid (excluding final rest)
03330	Molar (excluding final rest)
04321	Provisional splinting- extracoronal
07270	Tooth reimplantation and/or stabilization (splinting)
09211	Regional block anesthesia
09215	Local anesthesia
09951	Occlusal adjustment - Limited
09973	Patient treated

### **Dental Condition: 804 Candidiasis**

<b>DPC</b>	<b>Dental Procedure</b>
00140	Limited oral evaluation
01310	Nutritional counseling
01320	Tobacco counseling
01330	Oral hygiene instructions
09630	Other drugs and/or medicaments
09973	Patient treated

### **Dental Condition: 805 Caries no Pulp Involvement**

<b>DPC</b>	<b>Dental Procedure</b>
00140	Limited oral evaluation
00220	Intraoral-periapical-first film
00460	Pulp vitality tests
01310	Nutritional counseling
01320	Tobacco counseling
01330	Oral hygiene instructions
02140	Amalgam - one surface, permanent
02150	Amalgam - two surfaces, permanent
02160	Amalgam - three surfaces, permanent
02161	Amalgam - four or more surf, permanent
02330	Resin - one surface, anterior
02331	Resin - two surfaces, anterior
02332	Resin - three surfaces, anterior
02335	Resin - four or more, or incisal, ante
02385	Resin-one surface, post, permanent
02386	Resin-two surfaces, post, permanent
02387	Resin-three or more surf, post, permanent
02940	Sedative filling
03120	Pulp cap - indirect (excluding final rest)
09211	Regional block anesthesia
09215	Local anesthesia
09973	Patient treated

## Appendix B - Dental Conditions Linked to Dental Procedures

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### Dental Condition: 806 Caries with Pulp Involvement

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DPC	Dental Procedure
00140	Limited oral evaluation
00220	Intraoral-periapical-first film
00230	Intraoral-periapical-each additional
00460	Pulp vitality tests
01330	Oral hygiene instructions
02140	Amalgam - one surface, permanent
02150	Amalgam - two surfaces, permanent
02160	Amalgam - three surfaces, permanent
02161	Amalgam - four or more surf, permanent
02330	Resin - one surface, anterior
02331	Resin - two surfaces, anterior
02332	Resin - three surfaces, anterior
02335	Resin - four or more, or incisal, ante
02385	Resin-one surface, post, permanent
02386	Resin-two surfaces, post, permanent
02387	Resin-three or more surf, post, permanent
02940	Sedative filling
03110	Pulp cap - direct (excluding final restoration))
03220	Therapy pulpotomy (excluding final restoration)
03310	Anterior (excluding final rest)
03320	Bicuspid (excluding final rest)
03330	Molar (excluding final rest)
09211	Regional block anesthesia
09215	Local anesthesia
09630	Other drugs and/or medicaments
09951	Occlusal adjustment - Limited
09973	Patient treated

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### Dental Condition: 807 Cellulitis

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DPC	Dental Procedure
00140	Limited oral evaluation
00220	Intraoral-periapical-first film
01330	Oral hygiene instructions
09211	Regional block anesthesia
09215	Local anesthesia
09630	Other drugs and/or medicaments
09973	Patient treated



## Appendix B - Dental Conditions Linked to Dental Procedures

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**Dental Condition: 808 Crown Loose**

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<b>DPC</b>	<b>Dental Procedure</b>
00140	Limited oral evaluation
01330	Oral hygiene instructions
02920	Recement crown
02970	Temporary crown (fractured tooth)
09951	Occlusal adjustment - Limited
09973	Patient treated

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**Dental Condition: 809 Crown Broken/Missing**

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<b>DPC</b>	<b>Dental Procedure</b>
00140	Limited oral evaluation
01330	Oral hygiene instructions
02970	Temporary crown (fractured tooth)
03120	Pulp cap - indirect (excluding final rest)
09211	Regional block anesthesia
09215	Local anesthesia
09630	Other drugs and/or medicaments
09910	Application of desensitizing medicament
09951	Occlusal adjustment - Limited
09973	Patient treated

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**Dental Condition: 810 Defective Restoration**

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<b>DPC</b>	<b>Dental Procedure</b>
00140	Limited oral evaluation
00220	Intraoral-periapical-first film
00460	Pulp vitality tests
01310	Nutritional counseling
01320	Tobacco counseling
01330	Oral hygiene instructions
02140	Amalgam - one surface, permanent
02150	Amalgam - two surfaces, permanent
02160	Amalgam - three surfaces, permanent
02161	Amalgam - four or more surf, permanent
02330	Resin - one surface, anterior
02331	Resin - two surfaces, anterior
02332	Resin - three surfaces, anterior
02335	Resin - four or more, or incisal, ante
02385	Resin-one surface, post, permanent
02386	Resin-two surfaces, post, permanent
02387	Resin-three or more surf, post, permanent
02940	Sedative filling
03120	Pulp cap - indirect (excluding final rest)
09211	Regional block anesthesia
09215	Local anesthesia
09973	Patient treated

## Appendix B - Dental Conditions Linked to Dental Procedures

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### Dental Condition: 811 Dentin Hyper-Sensitivity

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DPC	Dental Procedure
00140	Limited oral evaluation
00220	Intraoral-periapical-first film
00460	Pulp vitality tests
01204	Topical fluoride (no prophy)-adult
01330	Oral hygiene instructions
02330	Resin - one surface, anterior
09211	Regional block anesthesia
09215	Local anesthesia
09630	Other drugs and/or medicaments
09910	Application of desensitizing medicament
09973	Patient treated

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### Dental Condition: 812 Food Impaction/Foreign Body

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DPC	Dental Procedure
00140	Limited oral evaluation
00220	Intraoral-periapical-first film
01330	Oral hygiene instructions
04341	Perio scale and root plan, per quad
07530	Removal of for body, skin, or subcutaneous area
07910	Suture of small wounds up to 5 cm
09110F	Pall (emergency) treatment of dental pain - min
09211	Regional block anesthesia
09215	Local anesthesia
09973	Patient treated

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### Dental Condition: 813 Fractured Alveolar Bone

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DPC	Dental Procedure
00140	Limited oral evaluation
01330	Oral hygiene instructions
04321	provisional splinting extracoronaral
07110	single tooth
07270	tooth reimplantation and/or stabilization
09211	Regional block anesthesia
09215	Local anesthesia
09310	Consultation (possible evacuation)(possible evacuation)
09630	Other drugs and/or medicaments
09973	Patient treated

## Appendix B - Dental Conditions Linked to Dental Procedures

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### Dental Condition: 814 Fractured Mandible

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DPC	Dental Procedure
00140	Limited oral evaluation
01330	Oral hygiene instructions
07910	Suture of small wounds up to 5 cm
07911	Complicated suture - up to 5 cm
07912	Complicated suture - greater than 5 cm
09110M	Pall (emergency) treatment of dental pain - stabilize
09211	Regional block anesthesia
09215	Local anesthesia
09310	Consultation (possible evacuation)(possible evacuation)
09630	Other drugs and/or medicaments
09973	Patient treated

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### Dental Condition: 815 Fractured Maxilla

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DPC	Dental Procedure
00140	Limited oral evaluation
01330	Oral hygiene instructions
07910	Suture of small wounds up to 5 cm
07911	Complicated suture - up to 5 cm
07912	Complicated suture - greater than 5 cm
09110M	Pall (emergency) treatment of dental pain - stabilize
09211	Regional block anesthesia
09215	Local anesthesia
09310	Consultation (possible evacuation)(possible evacuation)
09630	Other drugs and/or medicaments
09973	Patient treated

## Appendix B - Dental Conditions Linked to Dental Procedures

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### Dental Condition: 816 Fractured Tooth

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DPC	Dental Procedure
00140	Limited oral evaluation
00220	Intraoral-periapical-first film
00230	Intraoral-periapical-each additional
00460	Pulp vitality tests
01330	Oral hygiene instructions
02140	Amalgam - one surface, permanent
02150	Amalgam - two surfaces, permanent
02160	Amalgam - three surfaces, permanent
02161	Amalgam - four or more surf, permanent
02330	Resin - one surface, anterior
02331	Resin - two surfaces, anterior
02332	Resin - three surfaces, anterior
02335	Resin - four or more, or incisal, ante
02385	Resin-one surface, post, permanent
02386	Resin-two surfaces, post, permanent
02387	Resin-three or more surf, post, permanent
02940	Sedative filling
02970	Temporary crown (fractured tooth)
03110	Pulp cap - direct (excluding final restoration)
03120	Pulp cap - indirect (excluding final rest)
03220	Therapy pulpotomy (excluding final restoration)
03310	Anterior (excluding final rest)
03320	Bicuspid (excluding final rest)
03330	Molar (excluding final rest)
07210	Surgical removal of erupted toot
09211	Regional block anesthesia
09215	Local anesthesia
09630	Other drugs and/or medicaments
09951	Occlusal adjustment - Limited
09973	Patient treated

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### Dental Condition: 817 Gingivitis

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DPC	Dental Procedure
00140	Limited oral evaluation
01110	Prophylaxis-adult
01204	Topical fluoride -adult
01310	Nutritional counseling
01320	Tobacco counseling
01330	Oral hygiene instructions
04341	Perio scale and root plan, per quad
09211	Regional block anesthesia
09215	Local anesthesia
09630	Other drugs and/or medicaments
09973	Patient treated

## Appendix B - Dental Conditions Linked to Dental Procedures

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### Dental Condition: 818 Maxillary Sinusitis

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DPC	Dental Procedure
00140	Limited oral evaluation
01320	Tobacco counseling
01330	Oral hygiene instructions
09630	Other drugs and/or medicaments
09973	Patient treated

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### Dental Condition: 819 Occlusal Trauma

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DPC	Dental Procedure
00140	Limited oral evaluation
00220	Intraoral-periapical-first film
01330	Oral hygiene instructions
09211	Regional block anesthesia
09215	Local anesthesia
09951	Occlusal adjustment - Limited
09973	Patient treated

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### Dental Condition: 820 Oral Ulcers: (cold sores, oral herpes, aphthous ulcers, canker sores)

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DPC	Dental Procedure
00140	Limited oral evaluation
01330	Oral hygiene instructions
09630	Other drugs and/or medicaments
09973	Patient treated

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### Dental Condition: 821 Osseous Sequestrum

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DPC	Dental Procedure
00140	Limited oral evaluation
00220	Intraoral-periapical-first film
01310	Nutritional counseling
01330	Oral hygiene instructions
07550	Sequestrectomy for osteomyelitis
09110S	Pall (emergency) treatment of dental pain - min
09211	Regional block anesthesia
09215	Local anesthesia
09973	Patient treated

## Appendix B - Dental Conditions Linked to Dental Procedures

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### Dental Condition: 822 Osteomyelitis

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DPC	Dental Procedure
00140	Limited oral evaluation
01310	Nutritional counseling
01330	Oral hygiene instructions
07550	Sequestrectomy for osteomyelitis
09211	Regional block anesthesia
09215	Local anesthesia
09310	Consultation (possible evacuation)(possible evacuation)
09630	Other drugs and/or medicaments
09973	Patient treated

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### Dental Condition: 823 Soft Tissue Laceration/Trauma

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DPC	Dental Procedure
00140	Limited oral evaluation
00220	Intraoral-periapical-first film
01320	Tobacco counseling
01330	Oral hygiene instructions
07910	Suture of small wounds up to 5 cm
07911	Complicated suture - up to 5 cm
07912	Complicated suture - greater than 5 cm
09211	Regional block anesthesia
09215	Local anesthesia
09630	Other drugs and/or medicaments
09973	Patient treated

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### Dental Condition: 824 Pericoronitis/Erupting Tooth

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DPC	Dental Procedure
00140	Limited oral evaluation
00220	Intraoral-periapical-first film
01310	Nutritional counseling
01320	Tobacco counseling
01330	Oral hygiene instructions
04341	Perio scale and root plan, per quad
07210	Surgical removal of erupted tooth
07220	Removal of impacted tooth - soft tissue
07230	Removal of impacted tooth - part bony
07510	Incision and drain of abscess - intraoral soft tissue
07903	Pericoronitis treatment
07971	Excision of pericoronal gingiva
09110E	Pall (emergency) treatment of dental pain - min
09211	Regional block anesthesia
09215	Local anesthesia
09630	Other drugs and/or medicaments
09973	Patient treated

## Appendix B - Dental Conditions Linked to Dental Procedures

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**Dental Condition: 825 Periodontitis/Periodontal Abscess**

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<b>DPC</b>	<b>Dental Procedure</b>
00140	Limited oral evaluation
00220	Intraoral-periapical-first film
00230	Intraoral-periapical-each additional
00460	Pulp vitality tests
01310	Nutritional counseling
01320	Tobacco counseling
01330	Oral hygiene instructions
04341	Perio scale and root plan, per quad
07510	Incision and drain of abscess - intraoral soft tissue
09211	Regional block anesthesia
09215	Local anesthesia
09630	Other drugs and/or medicaments
09973	Patient treated

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**Dental Condition: 826 Post Operative Problem**

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<b>DPC</b>	<b>Dental Procedure</b>
00140	Limited oral evaluation
00220	Intraoral-periapical-first film
00460	Pulp vitality tests
01330	Oral hygiene instructions
02940	Sedative filling
09110P	Pall (emergency) treatment of dental pain - min
09210	Local anesthesia not in conjunction w operative or s
09211	Regional block anesthesia
09215	Local anesthesia (includes use for pain)
09630	Other drugs and/or medicaments
09951	Occlusal adjustment - Limited
09973	Patient treated

## Appendix B - Dental Conditions Linked to Dental Procedures

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### Dental Condition: 827 Post Surgery Complications

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DPC	Dental Procedure
00140	Limited oral evaluation
01330	Oral hygiene instructions
00220	Intraoral-periapical-first film
04920	Unscheduled Dressing change
07510	Incision and Drain of abscess - intraoral soft tissue
07520	Incision and drain of abscess - extraoral soft tissue
07550	Sequestrectomy for osteomyelitis
07903	Pericoronitis treatment
07910	Suture of small wounds up to 5 cm
09110C	Pall (emergency) treatment of dental pain - min
09210	Local anesthesia not in conjunction w operative or s
09211	Regional block anesthesia
09215	Local anesthesia
09630	Other drugs and/or medicaments
09951	Occlusal adjustment - Limited
09973	Patient treated

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### Dental Condition: 828 Prosthesis Loose

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DPC	Dental Procedure
00140	Limited oral evaluation
09430	Office visit for observation
09310	Consultation (possible evacuation)
09973	Patient treated

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### Dental Condition: 829 Prosthesis Broken/Missing

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DPC	Dental Procedure
00140	Limited oral evaluation
05510	Repair to complete denture
05610	Repair resin denture base
08999	Removable appliance repair
09973	Patient treated



## Appendix B - Dental Conditions Linked to Dental Procedures

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### Dental Condition: 830 Pulpitis (Irreversible)

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DPC	Dental Procedure
00140	Limited oral evaluation
00220	Intraoral-periapical-first film
00230	Intraoral-periapical-each additional
00460	Pulp vitality tests
01330	Oral hygiene instructions
02140	Amalgam - one surface, permanent
02150	Amalgam - two surfaces, permanent
02160	Amalgam - three surfaces, permanent
02161	Amalgam - four or more surf, permanent
02330	Resin - one surface, anterior
02331	Resin - two surfaces, anterior
02332	Resin - three surfaces, anterior
02335	Resin - four or more, or incisal, ante
02385	Resin-one surface, post, permanent
02386	Resin-two surfaces, post, permanent
02387	Resin-three or more surf, post, permanent
02940	Sedative filling
03110	Pulp cap - direct (excluding final restoration)
03220	Therapy pulpotomy (excluding final restoration)
03310	Anterior (excluding final rest)
03320	Bicuspid (excluding final rest)
03330	Molar (excluding final rest)
09211	Regional block anesthesia
09215	Local anesthesia
09630	Other drugs and/or medicaments
09951	Occlusal adjustment - Limited
09973	Patient treated

## Appendix B - Dental Conditions Linked to Dental Procedures

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### Dental Condition: 831 Pulpitis (Reversible)

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DPC	Dental Procedure
00140	Limited oral evaluation
00220	Intraoral-periapical-first film
00460	Pulp vitality tests
01310	Nutritional counseling
01320	Tobacco counseling
01330	Oral hygiene instructions
02140	Amalgam - one surface, permanent
02150	Amalgam - two surfaces, permanent
02160	Amalgam - three surfaces, permanent
02161	Amalgam - four or more surf, permanent
02330	Resin - one surface, anterior
02331	Resin - two surfaces, anterior
02332	Resin - three surfaces, anterior
02335	Resin - four or more, or incisal, ante
02385	Resin-one surface, post, permanent
02386	Resin-two surfaces, post, permanent
02387	Resin-three or more surf, post, permanent
02940	Sedative filling
03120	Pulp cap - indirect (excluding final rest)
09211	Regional block anesthesia
09215	Local anesthesia
09973	Patient treated

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### Dental Condition: 832 Root Fracture

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DPC	Dental Procedure
00140	Limited oral evaluation
00220	Intraoral-periapical-first film
00230	Intraoral-periapical-each additional
01330	Oral hygiene instructions
07130	Root removal - exposed roots
07210	Surgical removal of erupted toot
07270	Tooth reimplantation and/or stabilization
09110R	Pall (emergency) treatment of dental pain - min
09211	Regional block anesthesia
09215	Local anesthesia
09630	Other drugs and/or medicaments
09951	Occlusal adjustment - Limited
09973	Patient treated

## Appendix B - Dental Conditions Linked to Dental Procedures

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**Dental Condition: 833 Space Infection**

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<b>DPC</b>	<b>Dental Procedure</b>
00140	Limited oral evaluation
00220	Intraoral-periapical-first film
00230	Intraoral-periapical-each additional film
00460	Pulp vitality tests
07210	Surgical removal of erupted toot
07510	Incision and drain of abscess - intraoral soft tissue
09211	Regional block anesthesia
09215	Local anesthesia
09630	Other drugs and/or medicaments
09930	Treatment of unusual post-surgical complication
09973	Patient treated

**Appendix C**

**Dental Instrument Packs**

## Appendix C – Dental Instrument Packs

### EXAM PACK

<u>NSN</u>	<u>Description</u>	<u>QTY</u>	<u>UM</u>
6520005281000	Explorer Dental Cres #23 5.875-6.125" Lg	1	1/EA
6520000836403	Explorer Dental Endodontic No Dg 16	1	1/EA
6520002999671	Forceps Dressing Merian Cres Round Tip 6.125"Lg Tweezer Type	1	1/EA
6520007822648	Forceps Dressing Merian Cres Round Tip 6.125"Lg Tweezer Type	1	1/EA
6520005419350	Handle Mouth Examining Mirror Cres O/A Finish 4.5-4.75"Lg	1	1/EA
6520007822648	Mirror Mouth Examining Plane Glass Front Reflective Surface	1	1/EA
6520010467329	Probe Periodontal Glickman 26g Style 26g Brass Handle Cres Probe	1	1/EA
6510007822698	Sponge Surgical Gauze Absorbent White 4x4"8-Ply	5	200/PG

### INCISION & DRAIN PACK (I & D)

<u>NSN</u>	<u>DESCRIPTION</u>	<u>QTY</u>	<u>UM</u>
6520005281000	Explorer Dental Cres #23 5.875-6.125" Lg	1	1/EA
6520002999671	Forceps Dressing Merian Cres Round	1	1/EA
6520005419350	Handle Mouth Examining Mirror Cres	1	1/EA
6520007822648	Mirror Mouth Examining Plane Glass F	1	1/EA
6515009269201	Connector Tubing	1	50/PG
6520005842699	Elevator Periosteal Molt #9	1	1/EA
6515003344900	Forceps Hemo Halsted Design 4.75-5.25"	1	1/EA
6515003377800	Forceps Tissue Adson 4.50" Lg Tweezer	1	1/EA
6515003204590	Forceps Towel Backhaus 3.5" Lg Oppos	4	1/EA
6520005013515	Handle Dental Suction Apparatus Tip	1	1/EA
6515003447800	Handle Surgical Knife Detachable Blade	1	1/EA
6515003417200	Holder Suture Needle Collier 5" Lg St	1	1/EA
6515002998737	Holder Suture Needle Hegar-Mayo 7" L	1	1/EA
6515001817412	Needle Hypo C10A Dental 27GA 1.125-1.5"	2	100/PG
6515003644800	Scissors Iris 4-4.5" O/A Lg Sharp Points	1	1/EA
6520005551150	Scissors Oral Surgical Dean Cres 6.5-7	1	1/EA
6510007822698	Sponge Surgical Gauze Absorbent White 4x4" 8-Ply	5	200/PG
6515010108761	Syringe Cartridge Dental Aspirating S	1	1/EA
6520005013530	Tip Dental Suction Apparatus Coupland	1	1/EA
7210002999610	Towel Hand Cotton 36x17 Inches Solid	4	1/EA

## Appendix C – Dental Instrument Packs

### ENDO SUBPACK

<u>NSN</u>	<u>DESCRIPTION</u>	<u>QTY</u>	<u>UM</u>
<i>NSN not available</i>	Burnisher Dental Acorn	1	1/EA
6520010550018	Burnisher Dental Cres Double End 2.9mm &	1	1/EA
6520010555086	Burnisher Dental Cres Passivated Do	1	1/EA
6520004050765	Carrier Amalgam Double Ended Large	1	1/EA
6520012827732	Carver Den Cleoid-Discoid Biangle #U	1	1/EA
6520009357171	Carver Dental Hollenback #1/2 Cres F/	1	1/EA
6520009357252	Carver Dental Tanner #5t F/Amalgam &	1	1/EA
6520005157050	Clamp Rubber Dam Dental Cres Style 9 Cres	1	1/EA
6520009357189	Clamp Rubber Dam Dental Ferrier Cervical No.212 Crs 2 Jaw	1	1/EA
6520005158050	Clamp Rubber Dam Dental W14A Cres Mol	1	1/EA
6520005155750	Clamp Rubber Dam Dental W2A Cres Bicuspid	1	1/EA
6520005156050	Clamp Rubber Dam Dental W3 Cres Mol	1	1/EA
<i>No NSN</i>	Dycal Instrument	1	1/EA
6520009357181	Excavator Dental Black's Formula 11.5	1	1/EA
6520009357184	Excavator Dental Black's Formula 15.8	1	1/EA
6515003344900	Forceps Hemo Halsted Design 4.75-5.25"	1	1/EA
6520005316000	Forceps Rubber Dam Clamp Dental Cres	1	1/EA
6520010616445	Gage Endodontic Cres 5in Lg 4in W 0.031	1	1/EA
6515003447800	Handle Surgical Knife Detachable Blade	1	1/EA
6520009357143	Holder Rubber Dam Dental U-Shaped O	1	1/EA
6515001817412	Needle Hypo C10a Dental 27GA 1.125-1.5"	2	100/PG
6520009357256	Plugger Amalgam Den Cres Handle & P	1	1/EA
6520009357257	Plugger Amalgam Den Cres Handle & P	1	1/EA
6520005365250	Plugger Plastic Filling Den Cres Or B	1	1/EA
6520000836579	Plugger Pulp Canal Cres Handle Endo	1	1/EA
6520000836582	Plugger Pulp Canal Cres Handle Endo	1	1/EA
6520005523150	Retainer Matrix Dental Contra-Angle Tofflemire	1	1/EA
6515003644800	Scissors Iris 4-4.5" O/A Lg Sharp Points	1	1/EA
6520005568000	Spatula Dental Cres Flat Size 324 6.875-7.125"Lg	1	1/EA
6510007822698	Sponge Surgical Gauze Absorbent White 4x4" 8-Ply	5	200/PG
6520011264033	Spreader Gutta Percha Dental Cres S	1	1/EA
6520010648981	Spreader Gutta Percha Dental Crs Adult Offset Point 4.75in Lg	1	1/EA
<i>NSN not available</i>	Stellite	1	1/EA
6515010108761	Syringe Cartridge Dental Aspirating S	1	1/EA
6520011317922	Tip Dental Suction Apparatus Short C	1	1/EA
6520009357187	Trimmer Gingival Margin Black-Ferrier	1	1/EA
6520009357188	Trimmer Gingival Margin Black-Ferrier	1	1/EA

## Appendix C – Dental Instrument Packs

### PERIO & PROPHY PACK

<u>NSN</u>	<u>DESCRIPTION</u>	<u>QTY</u>	<u>UM</u>
6520005281000	Explorer Dental Cres #23 5.875-6.125" Lg	1	1/EA
6520002999671	Forceps Dressing Merian Cres Round	1	1/EA
6520005419350	Handle Mouth Examining Mirror Cres	1	1/EA
6520007822648	Mirror Mouth Examining Plane Glass F	1	1/EA
6520010063256	Curette Periodontal Gracey 1&2 Cres	1	1/EA
6520010056887	Curette Periodontal Gracey 11&12 Cr	1	1/EA
6520010056888	Curette Periodontal Gracey 13&14 Cres 6.250-6.562"L Double-Ended	1	1/EA
6520010063257	Curette Periodontal Gracey 3&4 Cres 6.250-6.562"L Dble-Ended*	1	1/EA
6520010063258	Curette Periodontal Gracey 5&6 Cres 6.250-6.562"L Dble-Ended*	1	1/EA
6520010063259	Curette Periodontal Gracey 7&8 Cres 6.250-6.562"L Dble-Ended*	1	1/EA
6520008902050	Curette Periodontal McCall 13s & 14s C	1	1/EA
6520008902051	Curette Periodontal McCall 17s&18s Cres 6.625-6.875"L Dble-Ended*	1	1/EA
6520005281000	Explorer Dental Cres #23 5.875-6.125" Lg	1	1/EA
6520000836403	Explorer Dental Endodontic No Dg 16	1	1/EA
6520002999671	Forceps Dressing Merian Cres Round	1	1/EA
6520005419350	Handle Mouth Examining Mirror Cres	1	1/EA
6520007822648	Mirror Mouth Examining Plane Glass F	1	1/EA
6515001817412	Needle Hypo C10A Dental 27GA 1.125-1.5"	1	100/PG
<i>NSN not available</i>	Prophy Polish Ring	1	1/EA
6520010467332	Scaler Dental Jacquette Design Style	1	1/EA
6510007822698	Sponge Surgical Gauze Absorbent White 4x4" 8-Ply	5	200/PG
6515010108761	Syringe Cartridge Dental Aspirating S	1	1/EA
6520011317922	Tip Dental Suction Apparatus Short C	1	1/EA

### POST OPERATIVE TREATMENT PACK (POT)

<u>NSN</u>	<u>DESCRIPTION</u>	<u>QTY</u>	<u>UM</u>
6520005281000	Explorer Dental Cres #23 5.875-6.125" Lg	1	1/EA
6520002999671	Forceps Dressing Merian Cres Round	1	1/EA
6520005419350	Handle Mouth Examining Mirror Cres	1	1/EA
6520007822648	Mirror Mouth Examining Plane Glass F	1	1/EA
6515003644800	Scissors Iris 4-4.5" O/A Lg Sharp Points	1	1/EA
6510007822698	Sponge Surgical Gauze Absorbent White 4x4" 8-Ply	5	200/PG

## Appendix C – Dental Instrument Packs

### OPERATIVE SUBPACK

<u>NSN</u>	<u>DESCRIPTION</u>	<u>QTY</u>	<u>UM</u>
<i>NSN not available</i>	Burnisher Dental Acorn	1	1/EA
6520010550018	Burnisher Dental Cres Dble End 2.9mm & 1.7mm Dia 175mm Lg 12s	1	1/EA
6520010555086	Burnisher Dental Cres Passivated Double End Round 170mm L	1	1/EA
6520004050765	Carrier Amalgam Double Ended Large And Regular Barrels	1	1/EA
6520012827732	Carver Den Cleoid-Discoid Binangle #UWD-5 Cres 6.4-6.5" Blade 12s	1	1/EA
6520009357171	Carver Dental Hollenback # 1/2 Cres F/Wax & Amalgam 6.375-6.750"	1	1/EA
6520009357252	Carver Dental Tanner #5t F/Amalgam & Wax 6.500"L	1	1/EA
6520005157050	Clamp Rubber Dam Dental Cres Style 9 Cres Ant F/Forceps	1	1/EA
6520009357189	Clamp Rubber Dam Dental Ferrier Cervical No.212 Crs 2 Jaw	1	1/EA
6520005156050	Clamp Rubber Dam Dental W3 Cres Molar .028" Thk	1	1/EA
6520005158050	Clamp Rubber Dam Dental W14A Cres Molar .028" Thk	1	1/EA
6520005155750	Clamp Rubber Dam Dental W2A Cres Bicuspid F/Forceps	1	1/EA
<i>No NSN</i>	Dycal Instrument	1	1/EA
6520009357181	Excavator Dental Black's Formula 11.5 7 15 #38 & #40 Cres	1	1/EA
6520009357184	Excavator Dental Black's Formula 15 8 15 #36 & #37 Cres	1	1/EA
6520008901724	Forceps Dental Articulating Paper Cres Tweezer Type 6 inches Long	1	1/EA
6515003344900	Forceps Hemo Halsted Design 4.75-5.25" Lg Slightly Curved Serr Crs	1	1/EA
6520005316000	Forceps Rubber Dam Clamp Dental Cres 6.125-6.625" Long	1	1/EA
6515003447800	Handle Surgical Knife Detachable Blade Size 3 Narrow Nose	1	1/EA
6520009357143	Holder Rubber Dam Dental U-Shaped One-Piece Adult Size	1	1/EA
6515001817412	Needle Hypo C10a Dental 27GA 1.125-1.50" Lg Threaded Sterile	2	100/PG
6520009357256	Plugger Amalgam Den Cres Handle & Point Tanner 2t 6.375-6.625"Lg	1	1/EA
6520009357257	Plugger Amalgam Den Cres Handle & Point Tanner 2t 6.375-6.625"Lg	1	1/EA
6520005523150	Retainer Matrix Dental Contra-Angle Tofflemire	1	1/EA
6515003644800	Scissors Iris 4-4.50" O/A Lg Sharp Points 0.375" Cut Length Crs	1	1/EA
6510007822698	Sponge Surgical Gauze Absorbent White 4x4"8-Ply	5	200/PG
<i>NSN not available</i>	Stellite	1	1/EA
6515010108761	Syringe Cartridge Dental Aspirating Side Loading Screw Cap	1	1/EA
6520011317922	Tip Dental Suction Apparatus Short Crs 0.438 in. Od 4.5 in. Lg	1	1/EA
6520009357187	Trimmer Gingival Margin Black-Ferrier #28 Cres Dble-Ended 6.25"Lg	1	1/EA
6520009357188	Trimmer Gingival Margin Black-Ferrier #29 Cres Dble-Ended 6.25"Lg	1	1/EA



## Appendix C – Dental Instrument Packs

### SURGERY PACK

<u>NSN</u>	<u>DESCRIPTION</u>	<u>QTY</u>	<u>UM</u>
6520005281000	Explorer Dental Cres #23 5.875-6.125" Lg	1	1/EA
6520005419350	Handle Mouth Examining Mirror Cres	1	1/EA
6520007822648	Mirror Mouth Examining Plane Glass F	1	1/EA
6515009269201	Connector Tubing	1	50/PG
6520005196770	Curette Alveolar Molt Cres Blade 2.12	1	1/EA
6520005196740	Curette Alveolar Molt Cres Blade 2.31	1	1/EA
6520005241550	Elevator And Retractor Dental Seldin	1	1/EA
6520005842699	Elevator Periosteal Molt #9	1	1/EA
6520005243050	Elevator Root #301	1	1/EA
6520005242550	Elevator Root #34-S	1	1/EA
6520005244550	Elevator Root Miller No 73 Crs Blade 6.125inches Long	1	1/EA
6520005245050	Elevator Root Miller No 74	1	1/EA
6520008646789	Elevator Root West #9L	1	1/EA
6520008646790	Elevator Root West #9R	1	1/EA
6520005285050	File Bone Seldin #11 Cres 7.750" O/A Lg D	1	1/EA
6520002999671	Forceps Dressing Merian Cres Round	1	1/EA
6515003344900	Forceps Hemo Halsted Design 4.75-5.25"	1	1/EA
6515003377800	Forceps Tissue Adson 4.50" Lg Tweezer	1	1/EA
6520001805964	Forceps Tooth Extracting Simpson #150	1	1/EA
6520001805971	Forceps Tooth Extracting Simpson #151	1	1/EA
6515003204590	Forceps Towel Backhauss 3.5" Lg Oppos	4	1/EA
6520005013515	Handle Dental Suction Apparatus Tip	1	1/EA
6515003447800	Handle Surgical Knife Detachable Blade	1	1/EA
6515003417200	Holder Suture Needle Collier 5" Lg St	1	1/EA
6515002998737	Holder Suture Needle Hegar-Mayo 7" L	1	1/EA
6520002623229	Hose Assembly Aspirator Avs No.1	1	1/EA
6515001817412	Needle Hypo C10a Dental 27GA 1.125-1.5"	2	100/PG
6520011253246	Prop Mouth Dental Rubber Adult Large	1	
6515003644800	Scissors Iris 4-4.5" O/A Lg Sharp Points	1	1/EA
6520005551150	Scissors Oral Surgical Dean Cres 6.5-7	1	1/EA
6510007822698	Sponge Surgical Gauze Absorbent White 4x4" 8-Ply	5	200/PG
6515010108761	Syringe Cartridge Dental Aspirating S	1	1/EA
6520005013530	Tip Dental Suction Apparatus Coupland	1	1/EA
7210002999610	Towel Hand Cotton 36x17 Inches Solid	4	1/EA

## Appendix C – Dental Instrument Packs

### FRACTURE PACK

<u>NSN</u>	<u>DESCRIPTION</u>	<u>QTY</u>	<u>UM</u>
6520005281000	Explorer Dental Cres #23 5.875-6.125" Lg	1	1/EA
6520002999671	Forceps Dressing Merian Cres Round	1	1/EA
6520005419350	Handle Mouth Examining Mirror Cres	1	1/EA
6520007822648	Mirror Mouth Examining Plane Glass F	1	1/EA
6515009269201	Connector Tubing Straight A18 Taper Serrations 3.5"Lg .188"Id	1	50/PG
6520005842699	Elevator Periosteal Molt #9	1	1/EA
6515003344900	Forceps Hemo Halsted Design 4.75-5.25" Lg Slightly Curved Serr Crs	1	1/EA
6515003204590	Forceps Towel Backhaus 3.5" Lg Opposed Prongs Towel Clamp Crs	4	1/EA
6520005013515	Handle Dental Suction Apparatus Tip	1	1/EA
6515003447800	Handle Surgical Knife Detachable Blade Size 3 Narrow Nose	1	1/EA
6515003417200	Holder Suture Needle Collier 5" Lg Straight Jaw Box Lock Crs	1	1/EA
6515002998737	Holder Suture Needle Hegar-Mayo 7" Lg Serrated Tungsten Carb Jaw	1	1/EA
6515001817412	Needle Hypo C10a Dental 27GA 1.125-1.50" Lg Threaded Sterile	2	100/PG
6520005548140	Scissors Collar & Crown Curved Carbon Style 4.06-4.31"Lg	1	1/EA
6515003644800	Scissors Iris 4-4.50" O/A Lg Sharp Points 0.375" Cut Length Crs	1	1/EA
6520005551150	Scissors Oral Surgical Dean Cres 6.5-7.0"Lg Finger Ring Grip	1	1/EA
6520001389980	Splint Jaw Cres Cres 900mm Lg .028" Thick Acid Resistant	1	1/EA
6510007822698	Sponge Surgical Gauze Absorbent White 4x4"8-Ply	5	200/PG
6515010108761	Syringe Cartridge Dental Aspirating Side Loading Screw Cap	1	1/EA
6520005013530	Tip Dental Suction Apparatus Coupland No 4	1	1/EA
7210002999610	Towel Hand Cotton 36 x 17in Solid Green Gray Nondisposable	4	1/EA

## Appendix C – Dental Instrument Packs

### PROSTHETIC SUBPACK

<u>NSN</u>	<u>DESCRIPTION</u>	<u>QTY</u>	<u>UM</u>
6515003644800	Scissors Iris 4-4.50" O/A Lg Sharp Points 0.375" Cut Length Crs	1	1/EA
6520005157050	Clamp Rubber Dam Dental Cres Style 9 Cres Ant F/Forceps	1	1/EA
6520009357189	Clamp Rubber Dam Dental Ferrier Cervical No.212 Crs 2 Jaw	1	1/EA
6520005156050	Clamp Rubber Dam Dental W3 Cres Molar .028" Thk	1	1/EA
6520005158050	Clamp Rubber Dam Dental W14A Cres Molar .028" Thk	1	1/EA
6520005155750	Clamp Rubber Dam Dental W2A Cres Bicuspid F/Forceps	1	1/EA
6520009357143	Holder Rubber Dam Dental U-Shaped One-Piece Adult Size	1	1/EA
6520005316000	Forceps Rubber Dam Clamp Dental Cres 6.125-6.625" Long	1	1/EA
<i>NSN not available</i>	Stellite	1	1/EA
6520011317922	Tip Dental Suction Apparatus Short Crs 0.438 in. Od 4.5 in. Lg	1	1/EA
6520009357181	Excavator Dental Black's Formula 11.5 7 15 #38 & #40 Cres	1	1/EA
6520009357184	Excavator Dental Black's Formula 15 8 15 #36 & #37 Cres	1	1/EA
6520008901724	Forceps Dental Articulating Paper Cres Tweezer Type 6 inches Long	1	1/EA
6515003344900	Forceps Hemo Halsted Design 4.75-5.25" Lg Slightly Curved Serr Crs	1	1/EA
6515003447800	Handle Surgical Knife Detachable Blade Size 3 Narrow Nose	1	1/EA
6515001817412	Needle Hypo C10a Dental 27GA 1.125-1.50" Lg Threaded Sterile	2	100/PG
6520009357256	Plugger Amalgam Den Cres Handle & Point Tanner 2t 6.375-6.625"Lg	1	1/EA
6520009357257	Plugger Amalgam Den Cres Handle & Point Tanner 2t 6.375-6.625"Lg	1	1/EA
6520005523150	Retainer Matrix Dental Contra-Angle Tofflemire	1	1/EA
6510007822698	Sponge Surgical Gauze Absorbent White 4x4"8-Ply	5	200/PG
6515010108761	Syringe Cartridge Dental Aspirating Side Loading Screw Cap	1	1/EA
6520009357187	Trimmer Gingival Margin Black-Ferrier #28 Cres Dble-Ended 6.25"Lg	1	1/EA

## **Appendix D**

### **Supply Requirement for each Dental Procedure**

## Appendix D – Supply Requirement for each Dental Procedure

### Dental Procedure: 00140 Limited Oral Evaluation

<u>Equipment</u>	<u>Qty</u>	<u>Consumables</u>	<u>Qty</u>	<u>UM</u>
Exam Pack	1	Sponge Surgical Gauze Absorbent White 4x4" 8-Ply	5	EA
		Glove Patient Exam/Treat Medium Size	4	EA
		Prepowder Snug Fitting Cuff 100s		
		Cover, Headrest	1	EA
		Patient Napkins 500s*	1	EA
		Holder Napkin Den Crm Alligator Jaw Ball	1	EA
		Chain 10"-12.25"		
		Spectacles Protective Dental Provider & Patient	3	EA
		Crvd Lens & Frames 36s		
		Mask Surgical Nonsterile Nonwoven Flat *	2	EA
		Depressor Tongue 6x0.75 X 0.062" Straight 100s	1	EA
		Saliva Ejector Den Plastic Disposable	1	EA

*\*Items added to upgrade clinical capability.*

## Appendix D – Supply Requirement for each Dental Procedure

Dental Procedure: 00220 Intraoral-Periapical-First Film<sup>1</sup>

Dental Procedure: 00230 Intraoral-Periapical-Each Additional Film<sup>1</sup>

<u>Equipment</u>	<u>Qty</u>	<u>Consumables</u>	<u>Qty<sup>2</sup></u>	<u>UM</u>
Apron X-Ray Protective Lightweight 38x24" Coat Style Sleeveless	1	Film Radiographic Dental	1	EA
X-Ray Apparatus Field Dental:	1	Roll Absorbent Cotton .5 By 1.5 Inches Sterile White	2	EA
Viewer Dental Radiographic Film 115 Volt 60 Hertz Ac	1			

<sup>1</sup> The supplies used for these tasks vary in the amount of consumables used.

<sup>2</sup> The amount cited vary depending on the procedure.

Appendix D – Supply Requirement for each Dental Procedure

Dental Procedure: 00460 Pulp Vitality Tests

<u>Equipment</u>	<u>Qty</u>	<u>Consumables</u>	<u>Qty</u>	<u>UM</u>
Tester Pulp Dental Battery Operated Digital Readout	1	Endo Ice*	1	CN
		Battery Nonrechargeable Alkaline 1.5v 1 Year Shelf Life	4	EA
		Applicator Wood Or Plastic 6" Lg Squared Off Disposable 100s	1	EA
		Benzocaine Gel 20% 1oz Or 28gm Bottle	1	BT

*\*Items added to upgrade clinical capability.*

# Appendix D – Supply Requirement for each Dental Procedure

## Dental Procedure: 01110 Prophylaxis-Adult

<u>Equipment</u>	<u>Qty</u>	<u>Consumables</u>	<u>Qty</u>	<u>UM</u>
Perio/Prophy Pack	1	Paste Preventive Dentistry Medium Grit 200 unit Dose Cup/Bx 4BX/PG800s	1	EA
Sonic Prophylaxis UN Dental Nonelectric Air Driven Autoclavable	1	Cup Polishing Dental Handpiece Rubber 36s	1	EA
Dispenser Den Floss Metal 2 Spool 3.438in x 3.438in x 2.438in 4s	1	Saliva Ejector Den Plastic Disposable U/W Den Operating Unit 1000s	1	EA
Handpiece Sys L/S Dent Cellular Optic	1	Sponge Surgical Gauze Abs White 4x4" 8-Ply	5	EA
		Floss Unwaxed Dental 200 Yards 24s U/W 6520-00-890-1871	1 FT	YD
		Floss Waxed Dental 200 Yards 24s U/W NSN 6520-00-890-1871	1 FT	YD
		Fluoride Rinse*	1	OZ
		Cup Disposable Round Two-Piece Rolled 5 oz Paper Paraffin 2500s	1	EA
		Prophy Polish Ring *	1	1/EA

*\*Items added to upgrade clinical capability.*



Dental Procedure: 01310 Nutritional Counseling

<u>Equipment</u>	<u>Qty</u>	<u>Consumables</u>	<u>Qty</u>	<u>UM</u>
	<i>No Supplies Needed</i>			

Dental Procedure: 01320 Tobacco Counseling

<u>Equipment</u>	<u>Qty</u>	<u>Consumables</u>	<u>Qty</u>	<u>UM</u>
	<i>No Supplies Needed</i>			

# Appendix D – Supply Requirement for each Dental Procedure

## Dental Procedure: 01330 Oral Hygiene Instructions

<u>Equipment</u>	<u>Qty</u>	<u>Consumables</u>	<u>Qty</u>	<u>UM</u>
Dispenser Dental Floss Metal 2 Spool 3.438in x 3.438in x 2.438in 4s	1	Toothbrush Straight Adult Polyamide Nylon 94 tuft Quantity 120s	1	EA
		Floss Unwaxed Dental 200 Yards 24s U/W 6520-00-890-1871	1 FT	YD
		Floss Waxed Dental 200 Yards 24s U/W NSN 6520-00-890-1871	1 FT	YD

## Appendix D – Supply Requirement for each Dental Procedure

**Dental Procedure: 02140 Amalgam - One Surface, Permanent<sup>1</sup>**  
**Dental Procedure: 02150 Amalgam - Two Surfaces, Permanent<sup>1</sup>**  
**Dental Procedure: 02160 Amalgam - Three Surfaces, Permanent<sup>1</sup>**  
**Dental Procedure: 02161 Amalgam - Four Or More Surf, Permanent<sup>1</sup>**

<u>Equipment</u>	<u>Qty</u>	<u>Consumables</u>	<u>Qty<sup>2</sup></u>	<u>UM</u>
Operative Pack	1	Band Matrix Dental Tofflemire Adult Size No 1 12s <sup>3</sup>	1	EA
Amalgamator Electric Dental 3700-4200 RPM 120V 60Hz 100W	1	Band Matrix Dental Tofflemire Adult Size No 2 12s <sup>3</sup>	1	EA
Punch Dental Rubber Dam Cres Pliers 5 Round Holes	1	Bur Dent Excavating Right Angle Carbide Steel #2 Extra Long Shank <sup>4</sup>	1	EA
Cup Dental Amalgam Corrosion-Resisting Steel	1	Bur Dent Excavating Right Angle Carbide Steel #4 Extra Long Shank <sup>4</sup>	1	EA
Handpiece High Speed Fiber Optic Lighting System	1	Bur Dental Angle Hndpc Tung Carb Hd Sz 7901 10s <sup>4</sup>	1	EA
Handpiece Sys L/S Dent Cellular Optic	1	Bur Dental Excavating Ang Hndpc Tung Carb Hd Sz 2 10s <sup>4</sup>	1	EA
		Bur Dental Excavating Angle Hdnpc Tung Carb Hd Sz 6 10s <sup>4</sup>	1	EA
		Bur Dental Excavating Angle Hndpc Tung Carb Hd 330 10s <sup>4</sup>	1	EA
		Bur Dental Excavating Angle Hndpc Tung Carb Hd Sz 2 10s <sup>4</sup>	1	EA
		Bur Dental Excavating Angle Hndpc Tung Carb Hd Sz 56 10s <sup>4</sup>	1	EA
		Bur Dental Excavating Friction Grip Ahp Tung Carb Hd Sz .500 10s	1	EA

<sup>1</sup> The supplies used for these task vary in the amount of consumables used.

<sup>2</sup> The amount cited vary depending on the procedure.

<sup>3</sup> The use of these supplies depend on the location of the condition.

<sup>4</sup> A variety of burs, files, and broaches provided to accommodate dentist choice.

## Appendix D – Supply Requirement for each Dental Procedure

Dental Procedure: 02140 Amalgam - One Surface, Permanent<sup>1</sup> (cont')  
 Dental Procedure: 02150 Amalgam - Two Surfaces, Permanent<sup>1</sup> (cont')  
 Dental Procedure: 02160 Amalgam - Three Surfaces, Permanent<sup>1</sup> (cont')  
 Dental Procedure: 02161 Amalgam - Four Or More Surf, Permanent<sup>1</sup> (cont')

<u>Equipment</u>	<u>Qty</u>	<u>Consumables</u>	<u>Qty</u> <sup>2</sup>	<u>UM</u>
Bur Dental Excavating Friction Grip Angle Hndpc Hd Sz 170l 10s <sup>4</sup>			1	EA
Bur Dental Excavating Friction Grip Angle Hndpc Hd Sz 33.5 10s <sup>4</sup>			1	EA
Bur Dental Excavating Right Ang Carbide Steel No. 6 X-Long Shank <sup>4</sup>			1	EA
Bur Dental Excavating Tung Carb Hd Sz 8 10s <sup>4</sup>			1	EA
Bur Dental Excavating Tung Carb Hd Ang Hndpc Hd Sz 4 10s <sup>4</sup>			1	EA
Bur Dental Finishing Friction Grip Ang Hndpc Tungsten Carb#7106 10s <sup>4</sup>			1	EA
Rubber Dam Heavy 6" Wide Green Or Blue Heavy 36s			1	EA
Roll Absorbent Cotton .5 By 1.5 Inches Sterile White 2000s			4	EA
Sponge Surgical Gauze Abs White 4x4"8-Ply U/F Injuries Or Surgery 200			5	EA
Prop Mouth Dental Rubber Adult Large			1	EA
Silver Alloy Powder & Mercury Cap Mixing Dental 600mg Precap500s*			2	EA

\*Items added to upgrade clinical capability.

<sup>1</sup> The supplies used for these task vary in the amount of consumables used.

<sup>2</sup> The amount cited vary depending on the procedure.

<sup>3</sup> The use of these supplies depend on the location of the condition.

<sup>4</sup> A variety of burs, files, and broaches provided to accommodate dentist choice.

Appendix D – Supply Requirement for each Dental Procedure

Dental Procedure: 02140 Amalgam - One Surface, Permanent<sup>1</sup> (cont')  
Dental Procedure: 02150 Amalgam - Two Surfaces, Permanent<sup>1</sup> (cont')  
Dental Procedure: 02160 Amalgam - Three Surfaces, Permanent<sup>1</sup> (cont')  
Dental Procedure: 02161 Amalgam - Four Or More Surf, Permanent<sup>1</sup> (cont')

<u>Equipment</u>	<u>Qty</u>	<u>Consumables</u>	<u>Qty</u> <sup>2</sup>	<u>UM</u>
		Wedge Set Dental Wood Cres Setter Materiel 5.125" Lg 500s <sup>3</sup>	1	EA
		Pellet Absorbent Middling Cotton White Sterile .250" Dia Den 2500s	3	EA

<sup>1</sup> The supplies used for these task vary in the amount of consumables used.  
<sup>2</sup> The amount cited vary depending on the procedure.  
<sup>3</sup> The use of these supplies depend on the location of the condition.  
<sup>4</sup> A variety of burs, files, and broaches provided to accommodate dentist choice.

## Appendix D – Supply Requirement for each Dental Procedure

Dental Procedure: 02330 Resin - One Surface, Anterior<sup>1</sup>  
 Dental Procedure: 002331 Resin - Two Surfaces, Anterior<sup>1</sup>  
 Dental Procedure: 02332 Resin - Three Surfaces, Anterior<sup>1</sup>  
 Dental Procedure: 02335 Resin - Four Or More, Or Incisal, Anterior<sup>1</sup>  
 Dental Procedure: 02385 Resin-One Surface, Posterior, Permanent<sup>1</sup>  
 Dental Procedure: 02386 Resin-Two Surfaces, Posterior, Permanent<sup>1</sup>  
 Dental Procedure: 02387 Resin-Three Or More Surf, Posterior, Permanent<sup>1</sup>

<u>Equipment</u>	<u>Qty</u>	<u>Consumables</u>	<u>Qty</u> <sup>2</sup>	<u>UM</u>
Operative Pack	1	Mandrel Dental Handpiece Angle Handpiece Spring Type 3s	1	EA
Curing System Den Visual Light Portable Fiber Optic 120V 60 Hz AC	1	Disk Set Abrasive Dental Hndpc Alum Oxide Snap-On Unmounted 240	1	EA
Punch Dental Rubber Dam Cres Pliers 5 Round Holes	1	Bur Dent Excavating Right Angle Carbide Steel #2 Extra Long Shank <sup>4</sup>	1	EA
Mandrel Dental Handpiece Angle Handpiece Spring Type 3s	1	Bur Dent Excavating Right Angle Carbide Steel #4 Extra Long Shank <sup>4</sup>	1	EA
Dispenser Strip Dental Plastic 1.594" Dia W/Finger Control	1	Bur Dental Angle Hndpc Tung Carb Hd Sz 7901 10s <sup>4</sup>	1	EA
Handpiece High Speed Fiber Optic Lighting System	1	Bur Dental Excavating Ang Hndpc Tung Carb Hd Sz 2 10s <sup>4</sup>	1	EA
Handpiece Sys L/S Dent Cellular Optic	1	Bur Dental Excavating Angle Hdnpc Tung Carb Hd Sz 6 10s <sup>4</sup>	1	EA
		Bur Dental Excavating Angle Hndpc Tung Carb Hd 330 10s <sup>4</sup>	1	EA
		Bur Dental Excavating Angle Hndpc Tung Carb Hd Sz 2 10s <sup>4</sup>	1	EA

<sup>1</sup> The supplies used for these task vary in the amount of consumables used.

<sup>2</sup> The amount cited vary depending on the procedure.

<sup>3</sup> The use of these supplies depend on the location of the condition.

<sup>4</sup> A variety of burs, files, and broaches provided to accommodate dentist choice.

## Appendix D – Supply Requirement for each Dental Procedure

Dental Procedure: 02330 Resin - One Surface, Anterior<sup>1</sup> (cont')  
 Dental Procedure: 002331 Resin - Two Surfaces, Anterior<sup>1</sup> (cont')  
 Dental Procedure: 02332 Resin - Three Surfaces, Anterior<sup>1</sup> (cont')  
 Dental Procedure: 02335 Resin - Four Or More, Or Incisal, Anterior<sup>1</sup> (cont')  
 Dental Procedure: 02385 Resin-One Surface, Posterior, Permanent<sup>1</sup> (cont')  
 Dental Procedure: 02386 Resin-Two Surfaces, Posterior, Permanent<sup>1</sup> (cont')  
 Dental Procedure: 02387 Resin-Three Or More Surf, Posterior, Permanent<sup>1</sup> (cont')

<u>Equipment</u>	<u>Qty</u>	<u>Consumables</u>	<u>Qty</u> <sup>2</sup>	<u>UM</u>
		Bur Dental Excavating Angle Hndpc Tung Carb Hd Sz 56 10s <sup>4</sup>	1	EA
		Bur Dental Excavating Friction Grip Ahp Tung Carb Hd Sz .500 10s <sup>4</sup>	1	EA
		Bur Dental Excavating Friction Grip Angle Hndpc Hd Sz 170l 10s <sup>4</sup>	1	EA
		Bur Dental Excavating Friction Grip Angle Hndpc Hd Sz 33.5 10s <sup>4</sup>	1	EA
		Bur Dental Excavating Right Ang Carbide Steel No. 6 X-Long Shank <sup>4</sup>	1	EA
		Bur Dental Excavating Tung Carb Hd Sz 8 10s <sup>4</sup>	1	EA
		Bur Dental Excavating Tung Carb Hd Ang Hndpc Hd Sz 4 10s <sup>4</sup>	1	EA
		Bur Dental Finishing Friction Grip Ang Hndpc Tungsten Carb#7106 10s <sup>4</sup>	1	EA
		Cavity Lining & Thinner Set Dental Liner .50 oz BT Liner & Thinner EA	.01	OZ
		Pulp Protector Dental W/Radiopaque Quality	.01	OZ
		Rubber Dam Heavy 6" Wide Green Or Blue Heavy 36s	1	EA

<sup>1</sup> The supplies used for these task vary in the amount of consumables used.

<sup>2</sup> The amount cited vary depending on the procedure.

<sup>3</sup> The use of these supplies depend on the location of the condition.

<sup>4</sup> A variety of burs, files, and broaches provided to accommodate dentist choice.

# Appendix D -- Supply Requirement for each Dental Procedure

Dental Procedure: 02330 Resin - One Surface, Anterior<sup>1</sup> (cont')  
Dental Procedure: 002331 Resin - Two Surfaces, Anterior<sup>1</sup> (cont')  
Dental Procedure: 02332 Resin - Three Surfaces, Anterior<sup>1</sup> (cont')  
Dental Procedure: 02335 Resin - Four Or More, Or Incisal, Anterior<sup>1</sup> (cont')  
Dental Procedure: 02385 Resin-One Surface, Posterior, Permanent<sup>1</sup> (cont')  
Dental Procedure: 02386 Resin-Two Surfaces, Posterior, Permanent<sup>1</sup> (cont')  
Dental Procedure: 02387 Resin-Three Or More Surf, Posterior, Permanent<sup>1</sup> (cont')

<u>Equipment</u>	<u>Qty</u>	<u>Consumables</u>	<u>Qty</u> <sup>2</sup>	<u>UM</u>
		Roll Absorbent Cotton .5 By 1.5 Inches Sterile White	4	EA
		2000s		
		Sponge Surgical Gauze Abs White 4x4"8-Ply U/F Injuries	5	EA
		Or Surgery 200		
		Prop Mouth Dental Rubber Adult Large	1	EA
		Plastic Strip Dental Matrix Polyethylene .375"W	1"	RI
		U/W6520005236050		
		Wedge Set Dental Wood Cres Setter Materiel 5.125" Lg	1	EA
		500s <sup>3</sup>		
		Strip Abrasive Dent Alum Oxide 400 Grit Medium Plastic	2	EA
		Backing 150s <sup>3</sup>		
		Strip Assortment Abrasive Den Avg Sz 180 Fine Std Back	2	EA
		5.2-5.4" Lg <sup>3</sup>		
		Restorative Kit Dental Component Quantity 6 Radiopaque	1	EA
		Restorative Kit Dental Tph Compules Visible Light Cure	1	EA
		Pellet Absorbent Middling Cotton White Sterile .250"Dia	3	EA
		Den 2500s		
		Resin Asst Acrylic Dental Self-Curing In 2oz Dispenser 6	1	EA
		Shades		

<sup>1</sup> The supplies used for these task vary in the amount of consumables used.

<sup>2</sup> The amount cited vary depending on the procedure.

<sup>3</sup> The use of these supplies depend on the location of the condition.

<sup>4</sup> A variety of burs, files, and broaches provided to accommodate dentist choice.



Appendix D – Supply Requirement for each Dental Procedure

Dental Procedure: 02920 Recement Crown

<u>Equipment</u>	<u>Qty</u>	<u>Consumables</u>	<u>Qty</u>	<u>UM</u>
Mixing Slab Dental 6x3x.750" Glass Beveled	1	Cement Kit Luting Glass Ionomer Dental	1	EA
Spatula Dental Cres Flat Sz 324 6.875-7.125"Lg	1	Roll Absorbent Cotton .5 By 1.5 Inches Sterile White 2000s	4	EA

# Appendix D -- Supply Requirement for each Dental Procedure

## Dental Procedure: 02940 Sedative Filling

<u>Equipment</u>	<u>Qty</u>	<u>Consumables</u>	<u>Qty<sup>2</sup></u>	<u>UM</u>
Operative Pack	1	Band Matrix Dental Tofflemire Adult Size No 1 12s <sup>3</sup>	1	EA
Amalgamator Electric Dental 3700-4200 RPM 120V 60 Hz 100W	1	Wedge Set Dental Wood Cres Setter Materiel 5.125" Lg 500s <sup>3</sup>	1	EA
Punch Dental Rubber Dam Cres Pliers 5 Round Holes	1	Bur Dent Excavating Right Angle Carbide Steel #2 Extra Long Shank <sup>4</sup>	1	EA
Handpiece High Speed Fiber Optic Lighting System	1	Bur Dent Excavating Right Angle Carbide Steel #4 Extra Long Shank <sup>4</sup>	1	EA
Handpiece Sys L/S Dent Cellular Optic	1	Bur Dental Angle Hndpc Tung Carb Hd Sz 7901 10s <sup>4</sup>	1	EA
		Bur Dental Excavating Ang Hndpc Tung Carb Hd Sz 2 10s <sup>4</sup>	1	EA
		Bur Dental Excavating Angle Hdnpc Tung Carb Hd Sz 6 10s <sup>4</sup>	1	EA
		Bur Dental Excavating Angle Hndpc Tung Carb Hd 330 10s <sup>4</sup>	1	EA
		Bur Dental Excavating Angle Hndpc Tung Carb Hd Sz 2 10s <sup>4</sup>	1	EA
		Bur Dental Excavating Angle Hndpc Tung Carb Hd Sz 56 10s <sup>4</sup>	1	EA
		Bur Dental Excavating Friction Grip Ahp Tung Carb Hd Sz .500 10s <sup>4</sup>	1	EA
		Bur Dental Excavating Friction Grip Angle Hndpc Hd Sz 170l 10s <sup>4</sup>	1	EA
		Bur Dental Excavating Friction Grip Angle Hndpc Hd Sz 33.5 10s <sup>4</sup>	1	EA

<sup>2</sup> The amount cited vary depending on the procedure.

<sup>3</sup> The use of these supplies depend on the location of the condition.

<sup>4</sup> A variety of burs, files, and broaches provided to accommodate dentist choice.

# Appendix D – Supply Requirement for each Dental Procedure

## Dental Procedure: 02940 Sedative Filling (cont')

<u>Equipment</u>	<u>Qty</u>	<u>Consumables</u>	<u>Qty<sup>2</sup></u>	<u>UM</u>
Bur Dental Excavating Right Ang Carbide Steel No. 6 X-Long Shank <sup>4</sup>			1	EA
Bur Dental Excavating Tung Carb Hd Sz 8 10s <sup>4</sup>			1	EA
Bur Dental Excavating Tung Carb Hd Ang Hndpc Hd Sz 4 10s <sup>4</sup>			1	EA
Cavity Lining & Thinner Set Dental Liner .50 oz BT Liner & Thinner EA			.01	OZ
Pulp Protector Dental W/Radiopaque Quality			.01	OZ
Rubber Dam Heavy 6" Wide Green Or Blue Heavy 36s			1	EA
Roll Absorbent Cotton .5 By 1.5 Inches Sterile White 2000s			4	EA
Sponge Surgical Gauze Abs White 4x4"8-Ply U/F Injuries Or Surgery 200			5	EA
Prop Mouth Dental Rubber Adult Large			1	EA
IRM Capsules*			2	EA
Pellet Absorbent Middling Cotton White Sterile .250"Dia Den 2500s			3	EA

\*Items added to upgrade clinical capability.

<sup>2</sup> The amount cited vary depending on the procedure.

<sup>3</sup> The use of these supplies depend on the location of the condition.

<sup>4</sup> A variety of burs, files, and broaches provided to accommodate dentist choice.

# Appendix D – Supply Requirement for each Dental Procedure

## Dental Procedure: 02951 Pin Retention

<u>Equipment</u>	<u>Qty</u>	<u>Consumables</u>	<u>Qty<sup>2</sup></u>	<u>UM</u>
Drill Pin Hole Den Contra-Ang 25mm L Spiral Blade 1.5mm L Head	1	Pin Kit Thd-Form Den Restorative Matl Retention Titanium .021"	1	EA
Drill Pin Hole Dental Contra-Angle Shank Dia 2.35mm Head L 1.5mm	1	Pin Kit Thd-Form Den Restorative Matl Retention Titanium 3.017"	1	EA
Bender Thread-Forming Pin Dental For .024" Dia Pins 3s	1			
Handpiece High Speed Fiber Optic Lighting System	1			

<sup>2</sup> The amount cited vary depending on the procedure.

Dental Procedure: 02970 Temporary Crown (Fractured Tooth)

<u>Equipment</u>	<u>Qty</u>	<u>Consumables</u>	<u>Qty</u>	<u>UM</u>
Handpiece High Speed Fiber Optic Lighting System	1	Crown Set Den Temporary Matrix Qty 64 Tin Alloy Assorted	1	EA
Handpiece Sys L/S Dent Cellular Optic	1	Crown Set Temporary Polycarbonate Anterior Set Of 180	1	EA
		IRM Capsules	1	EA
		Bur Denture F/Straight Hndpc Carb Steel Hd	1	EA
		Bur Denture F/Straight Hndpc Carb Steel Hd 4340 Shank 1.750"L	1	EA

# Appendix D – Supply Requirement for each Dental Procedure

## Dental Procedure: 03110 Pulp Cap - Direct (Excluding Final Restoration

<u>Equipment</u>	<u>Qty</u>	<u>Consumables</u>	<u>Qty</u>	<u>UM</u>
		Pulp Protector Dental W/Radiopaque Quality	.01	OZ
		Cavity Lining & Thinner Set Dental Liner .50 oz BT Liner & Thinner EA	.01	OZ
		Pellet Absorbent Middling Cotton White Sterile .250"Dia Den 2500s	3	EA

Dental Procedure: 03120 Pulp Cap - Indirect (Excluding Final Rest)

<u>Equipment</u>	<u>Qty</u>	<u>Consumables</u>	<u>Qty</u>	<u>UM</u>
		Pulp Protector Dental W/Radiopaque Quality	.01	OZ
		Cavity Lining & Thinner Set Dental Liner .50 oz BT Liner & Thinner EA	.01	OZ
		Pellet Absorbent Middling Cotton White Sterile .250" Dia Den 2500s	3	EA

## Appendix D – Supply Requirement for each Dental Procedure

### Dental Procedure: 03220 Therapy Pulpotomy (Excluding Final Restoration)<sup>1</sup>

### Dental Procedure: 03310 Anterior (Excluding Final Restoration)<sup>1</sup>

### Dental Procedure: 03320 Bicuspid (Excluding Final Restoration)<sup>1</sup>

### Dental Procedure: 03330 Molar (Excluding Final Restoration)<sup>1</sup>

<u>Equipment</u>	<u>Qty</u>	<u>Consumables</u>	<u>Qty</u>	<u>UM</u>
Gage Endodontic Cres 5in Lg 4in W 0.03in Thk 0-35mm	1	Bur Dent Excavating Right Angle Carbide Steel #2 Extra Long Shank <sup>4</sup>	1	EA
Punch Dental Rubber Dam Cres Plier 5 Round Holes		Bur Dent Excavating Right Angle Carbide Steel #4 Extra Long Shank <sup>4</sup>	1	EA
Handpiece High Speed Fiber Optic Lighting System	1	Bur Dental Angle Hndpc Tung Carb Hd Sz 7901 10s <sup>4</sup>	1	EA
Handpiece Sys L/S Dent Cellular Optic	1	Bur Dental Excavating Ang Hndpc Tung Carb Hd Sz 2 10s <sup>4</sup>	1	EA
		Bur Dental Excavating Angle Hdnpc Tung Carb Hd Sz 6 10s <sup>4</sup>	1	EA
		Bur Dental Excavating Angle Hndpc Tung Carb Hd 330 10s <sup>4</sup>	1	EA
		Bur Dental Excavating Angle Hndpc Tung Carb Hd Sz 2 10s <sup>4</sup>	1	EA
		Bur Dental Excavating Angle Hndpc Tung Carb Hd Sz 56 10s <sup>4</sup>	1	EA
		Bur Dental Excavating Friction Grip Ahp Tung Carb Hd Sz .500 10s <sup>4</sup>	1	EA
		Bur Dental Excavating Friction Grip Angle Hndpc Hd Sz 1701 10s <sup>4</sup>	1	EA
		Bur Dental Excavating Friction Grip Angle Hndpc Hd Sz 33.5 10s <sup>4</sup>	1	EA
		Bur Dental Excavating Right Ang Carbide Steel No. 6 X-Long Shank <sup>4</sup>	1	EA
		Bur Dental Excavating Tung Carb Hd Sz 8 10s <sup>4</sup>	1	EA

<sup>1</sup> The supplies used for these task vary in the amount of consumables used.

<sup>4</sup> A variety of burs, files, and broaches provided to accommodate dentist choice.



## Appendix D – Supply Requirement for each Dental Procedure

Dental Procedure: 03220 Therapy Pulpotomy (Excluding Final Restoration)<sup>1</sup> (cont')

Dental Procedure: 03310 Anterior (Excluding Final Restoration)<sup>1</sup> (cont')

Dental Procedure: 03320 Bicuspid (Excluding Final Restoration)<sup>1</sup> (cont')

Dental Procedure: 03330 Molar (Excluding Final Restoration)<sup>1</sup> (cont')

<u>Equipment</u>	<u>Qty</u>	<u>Consumables</u>	<u>Qty</u>	<u>UM</u>
		Bur Dental Excavating Tung Carb Hd Ang Hndpc Hd Sz 4 10s <sup>4</sup>	1	EA
		Drill Endodontic Gates Glidden F/Ahp Sz 3 Cres 6s <sup>4</sup>	1	EA
		Drill Endodontic Sz 3 Cres 6s <sup>4</sup>	1	EA
		Drill Endodontic U/W Angle Handpiece Sz 4 Cres 6s <sup>4</sup>	1	EA
		Drill Pin Hole Den Contra-Ang 25mm L Spiral Blade 1.5mm L Head	1	EA
		Drill Pin Hole Dental Contra-Angle Shank Dia 2.35mm Head L 1.5mm	1	EA
		File Pulp Canal Den 25mm Cres Blade Plastic HdL Size 90 Non-Cut Tip <sup>4</sup>	1	EA
		File Pulp Canal Den Crs Plastic Handle Sz 60 Rhomboidal Std Blue 6s <sup>4</sup>	1	EA
		File Pulp Canal Dental Cres Blade Plastic HdL Size 100 Non-Cut Tip <sup>4</sup>	1	EA
		File Pulp Canal Dental Rhomboidal Standardized Size 10 6s <sup>4</sup>	1	EA
		File Pulp Canal Dental Rhomboidal Standardized Size 15 6s <sup>4</sup>	1	EA
		File Pulp Canal Dental Rhomboidal Standardized Size 20 6s	1	EA
		File Pulp Canal Dental Rhomboidal Standardized Size 25 6s <sup>4</sup>	1	EA
		File Pulp Canal Dental Rhomboidal Standardized Size 30 6s <sup>4</sup>	1	EA

<sup>1</sup> The supplies used for these task vary in the amount of consumables used.

<sup>4</sup> A variety of burs, files, and broaches provided to accommodate dentist choice.

# Appendix D – Supply Requirement for each Dental Procedure

Dental Procedure: 03220 Therapy Pulpotomy (Excluding Final Restoration)<sup>1</sup> (cont')  
Dental Procedure: 03310 Anterior (Excluding Final Restoration)<sup>1</sup> (cont')  
Dental Procedure: 03320 Bicuspid (Excluding Final Restoration)<sup>1</sup> (cont')  
Dental Procedure: 03330 Molar (Excluding Final Restoration)<sup>1</sup> (cont')

<u>Equipment</u>	<u>Qty</u>	<u>Consumables</u>	<u>Qty</u>	<u>UM</u>
		File Pulp Canal Dental Rhomboidal Standardized Size 35 6s <sup>4</sup>	1	EA
		File Pulp Canal Dental Rhomboidal Standardized Size 40 6s <sup>4</sup>	1	EA
		File Pulp Canal Dental Rhomboidal Standardized Size 45 6s	1	EA
		File Pulp Canal Dental Rhomboidal Standardized Size 50 6s <sup>4</sup>	1	EA
		File Pulp Canal Dental Rhomboidal Standardized Size 55 6s <sup>4</sup>	1	EA
		File Pulp Canal Dental Rhomboidal Standardized Size 70 6s <sup>4</sup>	1	EA
		File Pulp Canal Dental Rhomboidal Standardized Size 8 6s <sup>4</sup>	1	EA
		File Pulp Canal Dental Rhomboidal Standardized Size 80 6s <sup>4</sup>	1	EA
		Broach Pulp Canal Cres Extra Fine Barbed 33mm Lg Ster Str 30s <sup>4</sup>	1	EA
		Broach Pulp Canal Cres Size Coarse Barbed 33mm Lg Ster Str 30s <sup>4</sup>	1	EA
		Broach Pulp Canal Crs Size Medium Barbed 33mm Lg Sterile Str 30s <sup>4</sup>	1	EA
		Point Endodontic Paper Coarse Sterile 40 Cells 5 Size 200s <sup>4</sup>	5	EA
		Point Endodontic Paper Sterile 40 Cells 5 Points P/Cell 200s <sup>4</sup>	5	EA
		Sodium Hypochlorite Sol 5% 6 GAL	1	OZ
		Monject Syringe And Needle*	1	EA
		Pellet Absorbent Middling Cotton White Sterile .250"Dia Den 2500s	3	EA
		Rubber Dam Heavy 6" Wide Green Or Blue Heavy 36s	1	EA

<sup>1</sup> The supplies used for these task vary in the amount of consumables used.

<sup>4</sup> A variety of burs, files, and broaches provided to accommodate dentist choice.

Appendix D – Supply Requirement for each Dental Procedure

Dental Procedure: 04321 Provisional Splinting- Extracoronal

<u>Equipment</u>	<u>Qty</u>	<u>Consumables</u>	<u>Qty</u>	<u>UM</u>
Curing System Den Visual Light Portable Fiber Optic 120v 60 Hz AC	1	Ostomy Strip Stomahesive Moldable*	1	SH
		Resin Asst Acrylic Dental Self-Curing In 2oz Dispenser 6 Shades	1	EA
		Restorative Kit Dental Component Quantity 6 Radiopaque	1	EA
		Restorative Kit Dental Tph Compules Visible Light Cure	1	EA
		Saliva Ejector Den Plastic Disposable	1	EA

*\*Items added to upgrade clinical capability.*

# Appendix D - Supply Requirement for each Dental Procedure

## Dental Procedure: 04341 Perio Scale And Root Plan, Per Quad

<u>Equipment</u>	<u>Qty</u>	<u>Consumables</u>	<u>Qty</u>	<u>UM</u>
Perio/Prophy Pack	1	Sponge Surgical Gauze Abs White 4x4" 8-Ply	5	EA
Sonic Prophylaxis UN Dental Nonelectric Air Driven Autoclavable	1	Saliva Ejector Den Plastic Disposable	1	EA

Appendix D – Supply Requirement for each Dental Procedure

Dental Procedure: 04355 Fm Debridement To Enab Comp Perio Evaluation

<u>Equipment</u>	<u>Qty</u>	<u>Consumables</u>	<u>Qty</u>	<u>UM</u>
Perio/Prophy Pack	1	Sponge Surgical Gauze Absorbent White 4x4" 8-Ply	5	EA
Sonic Prophylaxis UN Dental Nonelectric Air Driven Autoclavable	1	Saliva Ejector Den Plastic Disposable	1	EA

# Appendix D – Supply Requirement for each Dental Procedure

## Dental Procedure: 04920 Dress Change

<u>Equipment</u>	<u>Qty</u>	<u>Consumables</u>	<u>Qty</u>	<u>UM</u>
Pot Pack	1	Eugenol USP Bottle 1oz Or 23.35gm	0.01	OZ
		Gauze Absorbent Iodoform Impregnated .25 Inch By 5 Yards 12s	2	IN
		Sodium Chloride Irrigation USP 0.9% 1000ml Bottle 16 Per Package	0.05	ML
		Monoject Syringe And Needle*	1	EA
		Sponge Surgical Gauze Absorbent White 4x4" 8-Ply	5	EA
		Saliva Ejector Den Plastic Disposable	1	EA

*\*Items added to upgrade clinical capability.*

Appendix D -- Supply Requirement for each Dental Procedure

Dental Procedure: 07130 Root Removal - Exposed Roots

<u>Equipment</u>	<u>Qty</u>	<u>Consumables</u>	<u>Qty</u>	<u>UM</u>
Surgery Pack	1	Sponge Surgical Gauze Absorbent White 4x4" 8-Ply Saliva Ejector Den Plastic Disposable	5 1	EA EA

## Appendix D -- Supply Requirement for each Dental Procedure

**Dental Procedure: 09210 Local Anesthesia Not In Conjunction W Operative Oral Surgery**

**Dental Procedure: 09211 Regional Block Anesthesia**

**Dental Procedure: 09215 Local Anesthesia**

<u>Equipment</u>	<u>Qty</u>	<u>Consumables</u>	<u>Qty</u> <sup>2</sup>	<u>UM</u>
Syringe Cartridge Dental Aspirating Side Loading		Benzocaine Gel 20% 1oz 28gm Bottle	1	BT
Screw Cap		Bupivacaine And Epinephrine Injection USP 1.8ml Cartridge 50/Can <sup>5</sup>	1	CN
		Epinephrine Injection USP 0.1mg Per Ml Syringe-Needle Unit 10ml 10s <sup>5</sup>	1	PG
		Lidocaine Hydrochloride & Epinephrine Inj USP 1.8ml Cartridge 100s <sup>5</sup>	10	PG
		Mepivacaine Hydrochloride Injection USP 3% 1.8ml Cartridge 100/PG	1	PG
		Needle Hypo C10a Dental 27GA 1.125-1.50" Lg Threaded Sterile 100s	6	PG
		Roll Absorbent Cotton .5 By 1.5 Inches Sterile White 2000s	0.25	BX
		Applicator Wood Or Plastic 6" Lg Squared Off Disposable 100s	1	EA
		Disposal Container Hypo Needle & Syringe 6.9qt Plastic Puncture Resist 12s	1	EA

<sup>2</sup> The amount cited vary depending on the procedure.

<sup>5</sup> The use of these supplies depend on the dental condition and the patient's reaction to the anesthesia.



Appendix D – Supply Requirement for each Dental Procedure

Dental Procedure: 09630 Other Drugs and/or Medicaments

<u>Equipment</u>	<u>Qty</u>	<u>Consumables</u>	<u>Qty</u>	<u>UM</u>
		DD 1289 DOD Prescription Pad	1	PD
		Diphenhydramine Hydrochloride INJ USP 50mg/ML 1ml Syringe 10/BX	1	EA
		Envelope Drug Dispensing Paper White 2.5"W 4.25" Lg 100s	1	EA
		Ibuprofen Tablets USP 800 Mg 500 Tablets Per Bottle	30	EA

# Appendix D – Supply Requirement for each Dental Procedure

## Dental Procedure: 09973 Patient Treated

<u>Equipment</u>	<u>Qty</u>	<u>Consumables</u>	<u>Qty</u>	<u>UM</u>
Sterilizer Surgical Instrument Electric Htd Crm 1-3/4 X 1-3/4 In 115v AC-DC	1	Dental Health Questionnaire NAVMED 6600/3	1	EA
Sterilizer Surgical Instrument And Dressing 120/230V 15002 AC	1	Form, Printed	1	EA
Bottle, Applicator	1	Marker Identification Den Health Record Pressure Adhesive Red Plastic 3/8 x 7/8in 1000	1	EA
Incubator Bacteriological 53-59 Degree Celsius Integral Heat Steam	1	Marker Identification Den Health Record Pressure Adhesive Medium Green 3/8x7/8in1000s	1	EA
Cleaner Ultrasonic Dental Instrument 4-Qt Capacity 14 x 9 x 10 in Crs	1	Marker Identification Dent Health Record Pressure Sensitive Adhesive White 3/8 x 7/8 in 1000s	1	EA
		Pen ball-point Black Fine Point Pocket Retractable	1	EA
		Pencil Mechanical Black Barrel Automatic Operating Mechanism	1	EA
		Pad Writing Paper 8.5"W 11" Lg White A/A Pulp Type	1	EA
		SF 603 Form <sup>6</sup>	1	EA
		SF 603A Form <sup>6</sup>	1	EA
		Tape Sealing Sterilization Indicator 2160 x 1 in. Paper White 9s	1	IN
		Sterilization Test Ampules Bacterial Spore U/W Water Bath Or Dry	1	EA
		Sterilization Envelopes Paper/Plastic 10"X5.25" 400s	1	EA
		Bag Sterilization-Biohazard Disposal 23in H 19in Dia Plastic 200s	1	EA
		Cleaner Dental 100 Gram 12s		

<sup>6</sup> Need updated forms.

Appendix D – Supply Requirement for each Dental Procedure

Dental Procedure: 09973 Patient Treated (cont')

<u>Equipment</u>	<u>Qty</u>	<u>Consumables</u>	<u>Qty</u>	<u>UM</u>
		Detergent Surgical 4% Chlorhexidine Gluconate 32fl oz	1	OZ
		Detergent Plunger*	1	EA
		Disinfectant-Detergent General Purpose Iodine Liquid 2ml Packet 48s	1	OZ
		Pad Isopropyl Alcohol Impregnated Nonwoven Cotton/Rayon 1.5 X 2" 100	1	EA
		Towel, Paper	2	EA

\*Items added to upgrade clinical capability.

## REPORT DOCUMENTATION PAGE

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### 13. SUPPLEMENTARY NOTES

### 14. ABSTRACT (maximum 200 words)

Maintenance and sustainment of assets have become a unique challenge due in part to procurement, cost, space, storage, and the constraints of transportation. Accomplishing this objective for greater battlefield mobility requires that medical and dental be outfitted with the proper equipment and supplies that are directly related to its mission and capabilities. Supplies linked to conditions and expected casualty rates will ensure that the proper assets are procured and available. The resulting study was designed to collect data to create a database useful as a tool for conducting future ADAL reviews, and for making decisions regarding adding and deleting new items. The model can be used to determine the specific supply configurations for other missions and objectives. It is also useful in determining the appropriate type and number of supply items required for the delivery of sick call dental care. As Marine Corps doctrine requires more mobile, modular, flexible, and deployable dental care systems, the NHRC model can be used in the configuration of dental supplies needed for a variety of scenarios.

### 15. SUBJECT TERMS

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